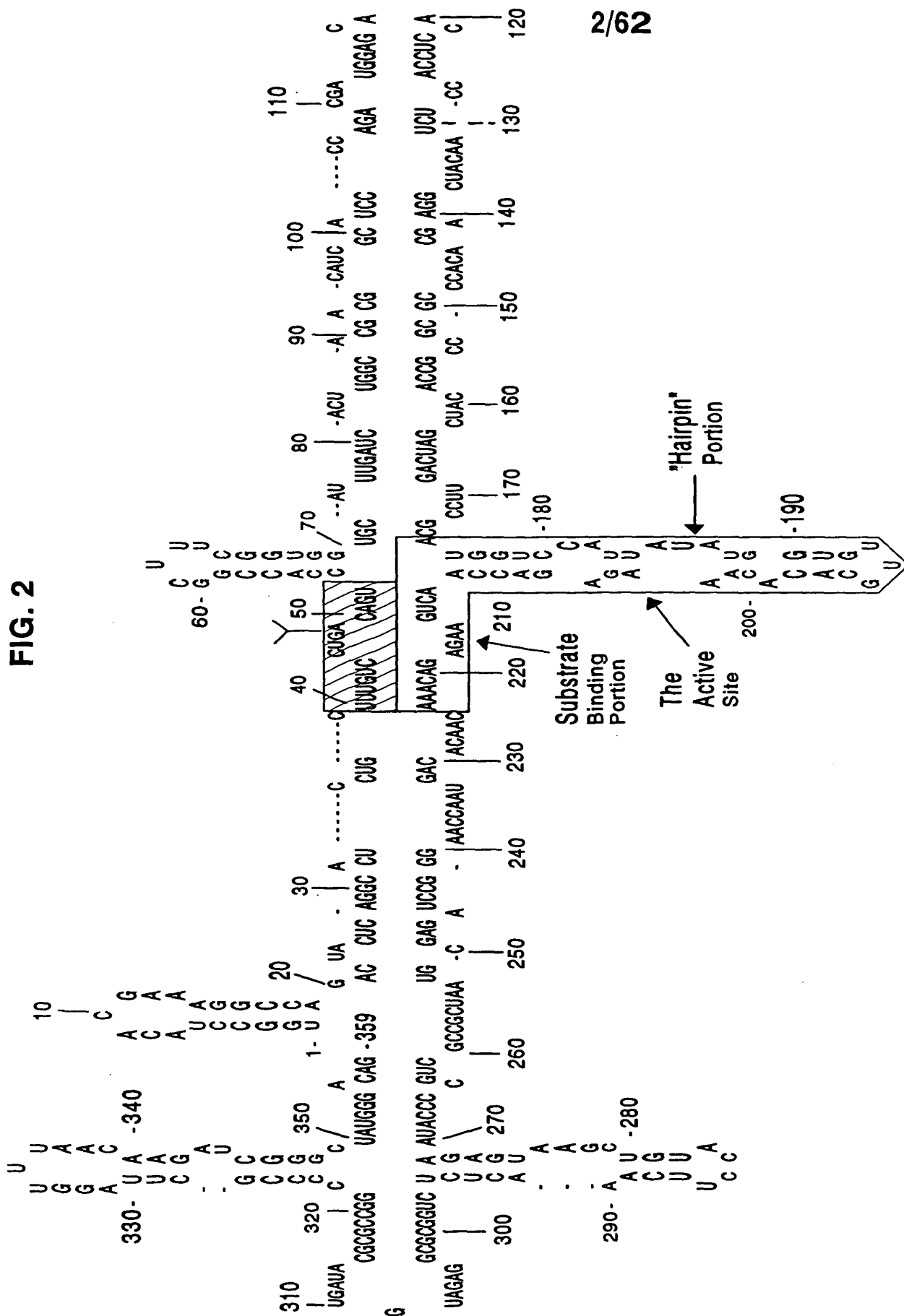


FIG. 1

FIG. 2



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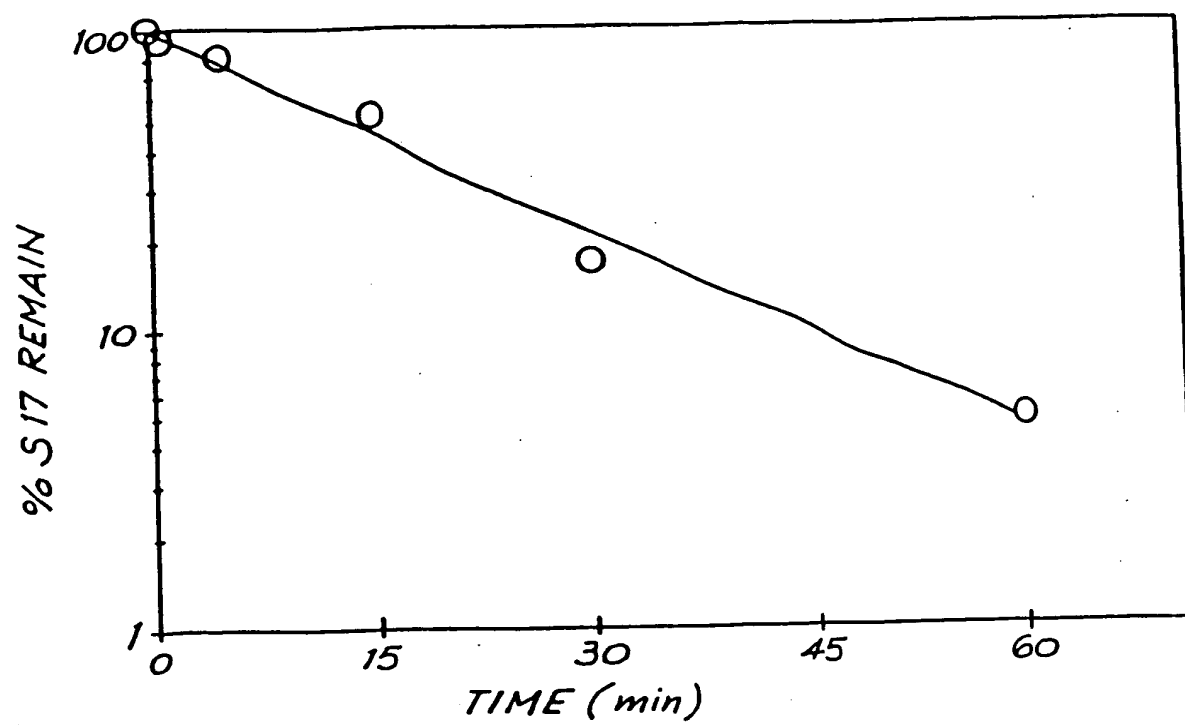


FIG. 3A

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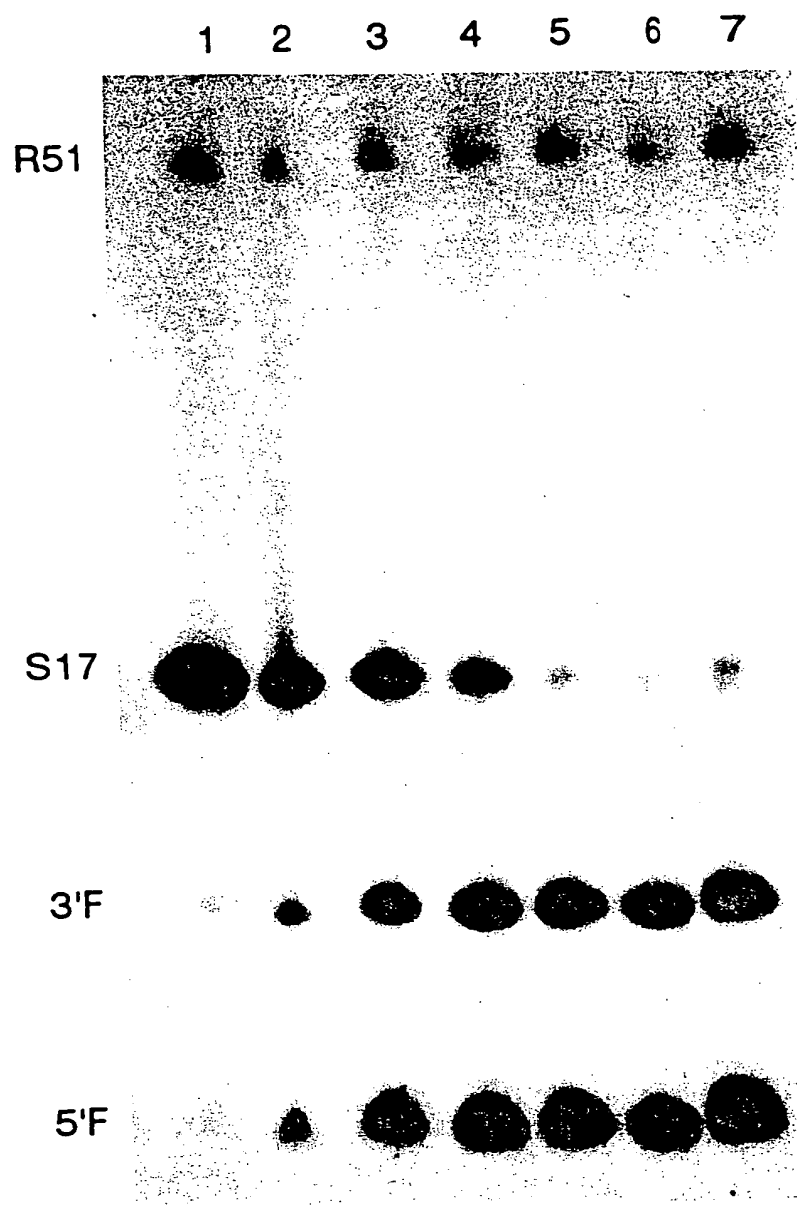


FIG. 3B

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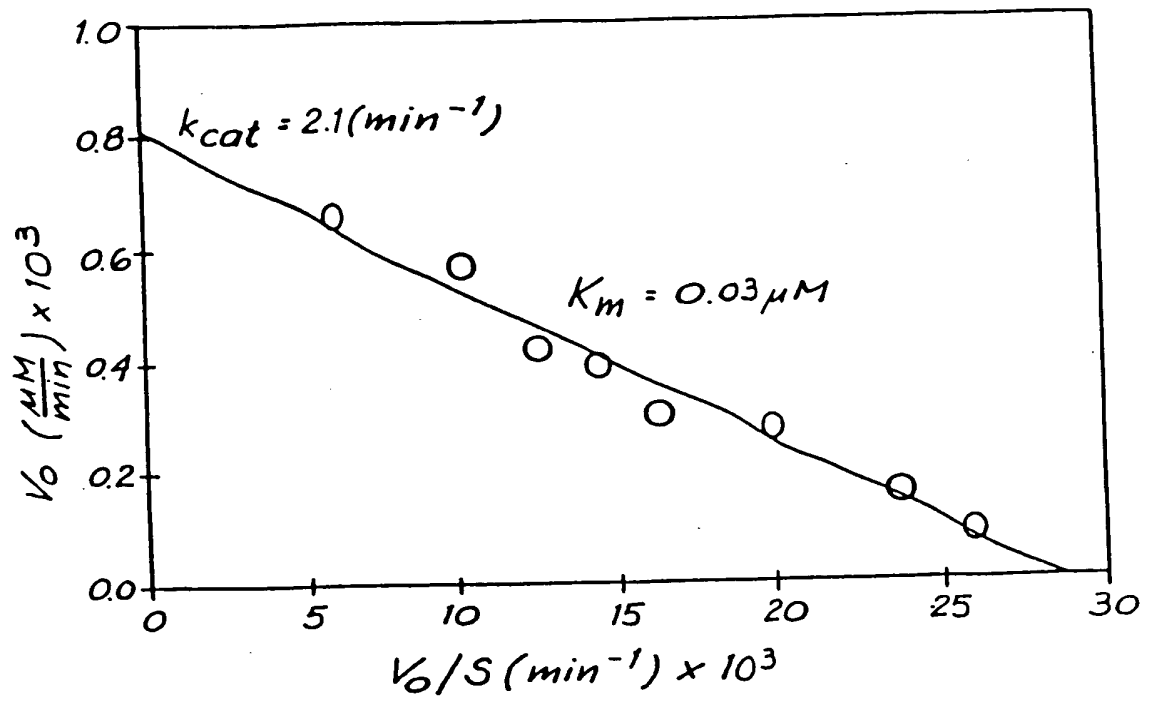


FIG. 4A

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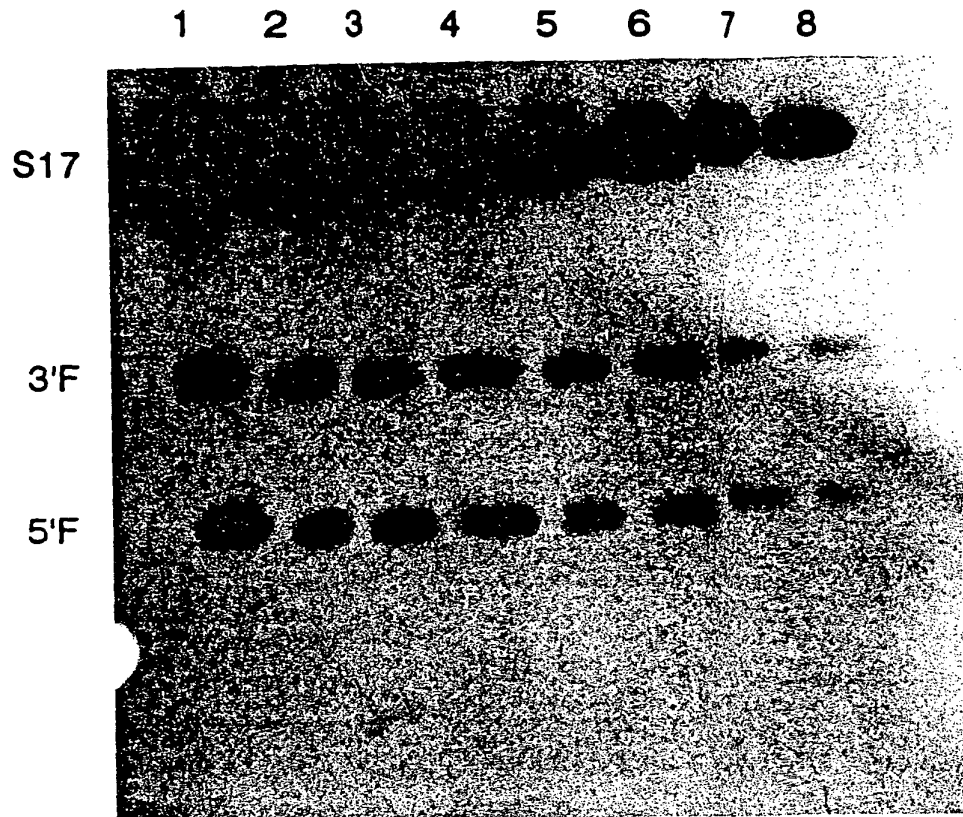


FIG. 4B

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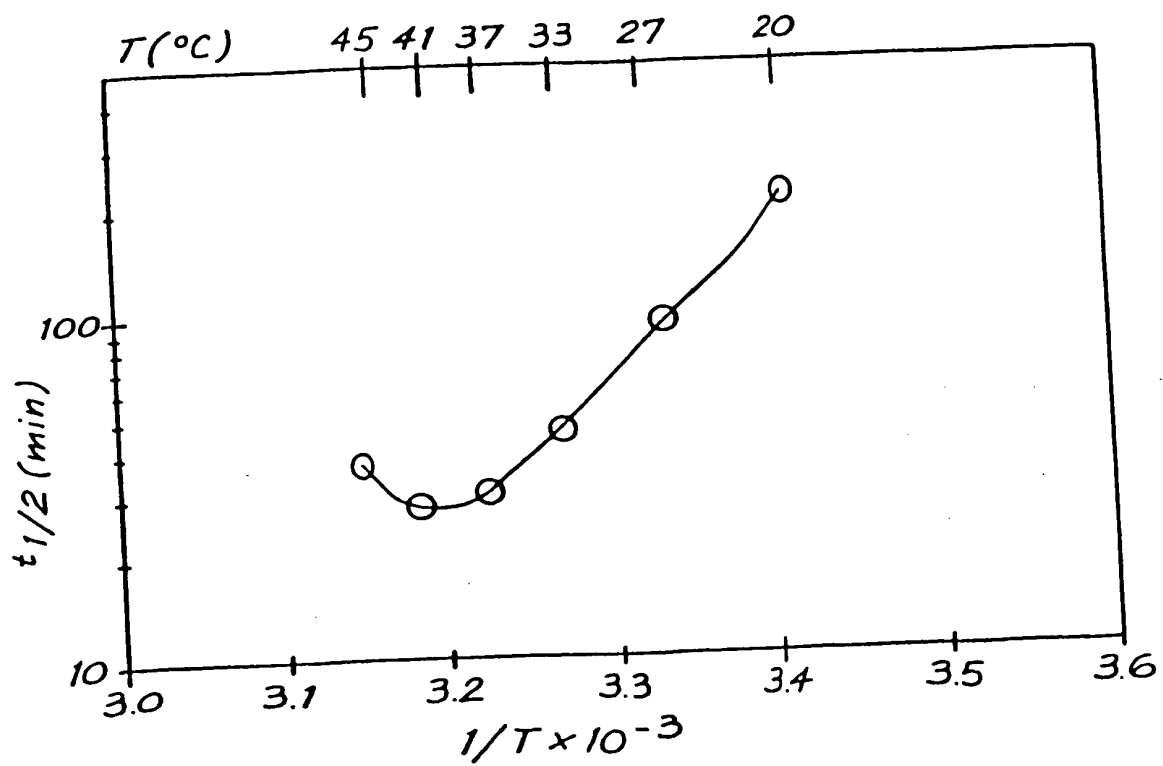


FIG. 5A

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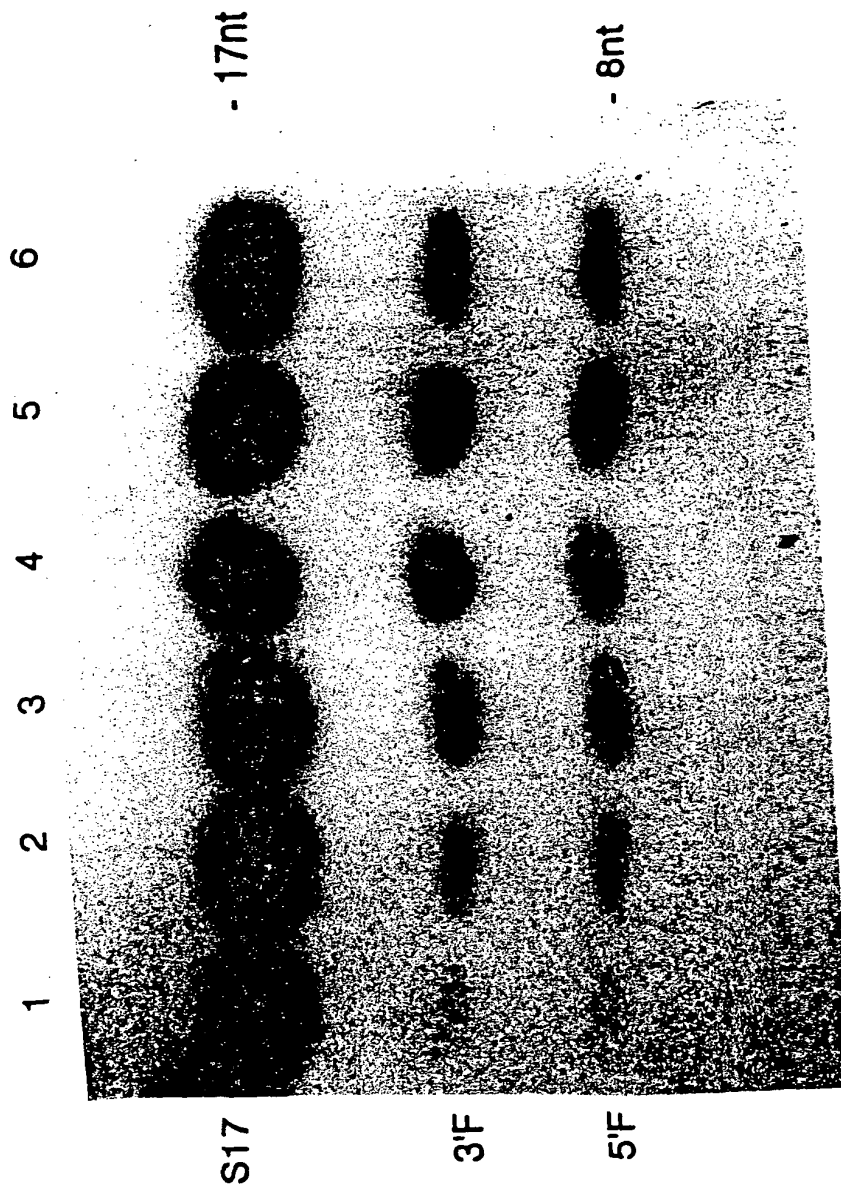


FIG. 5B

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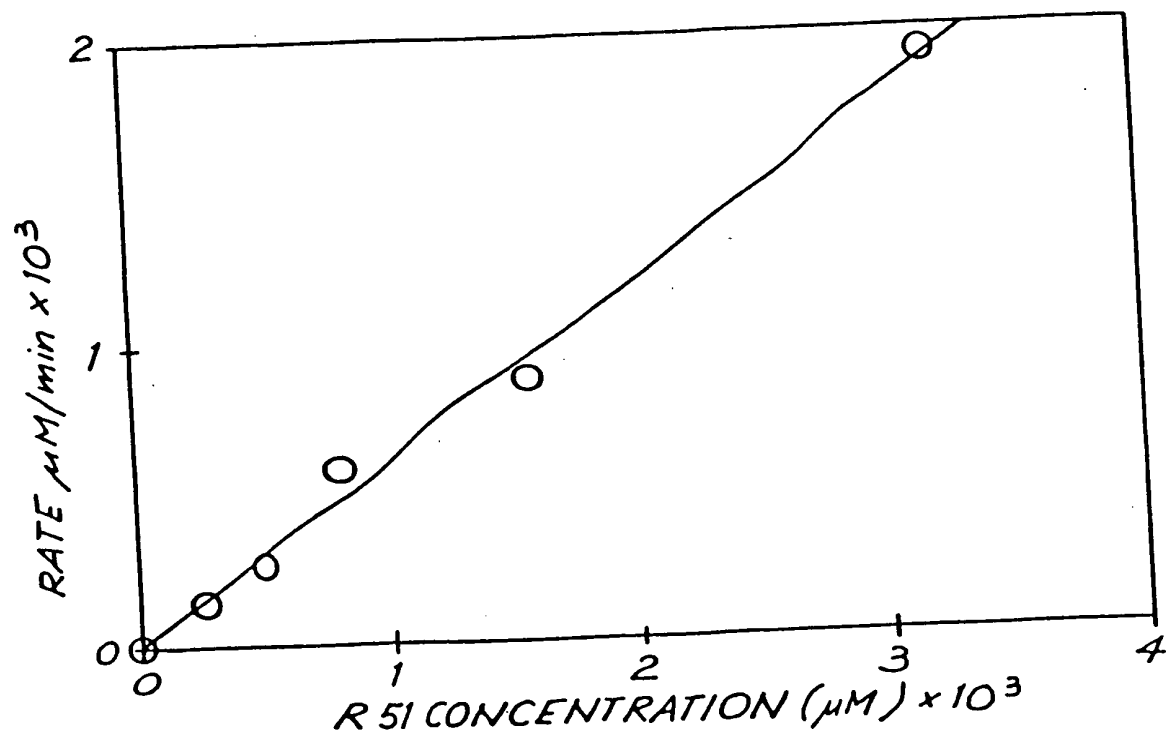


FIG. 6A

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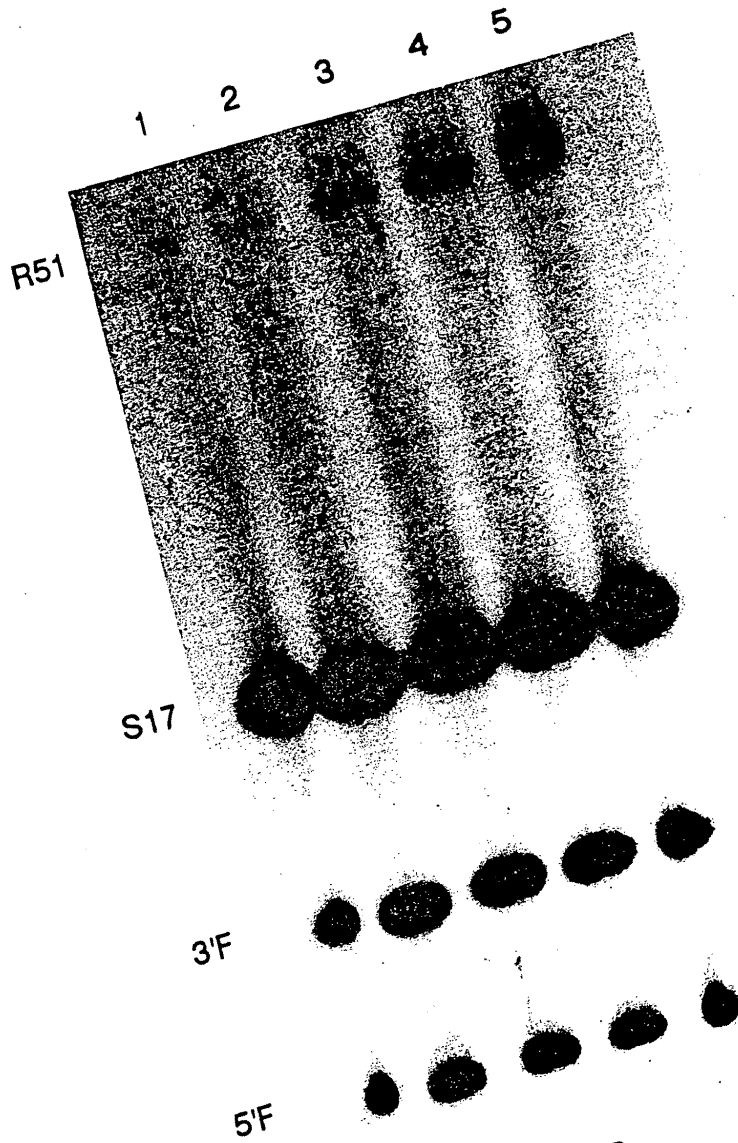


FIG. 6B

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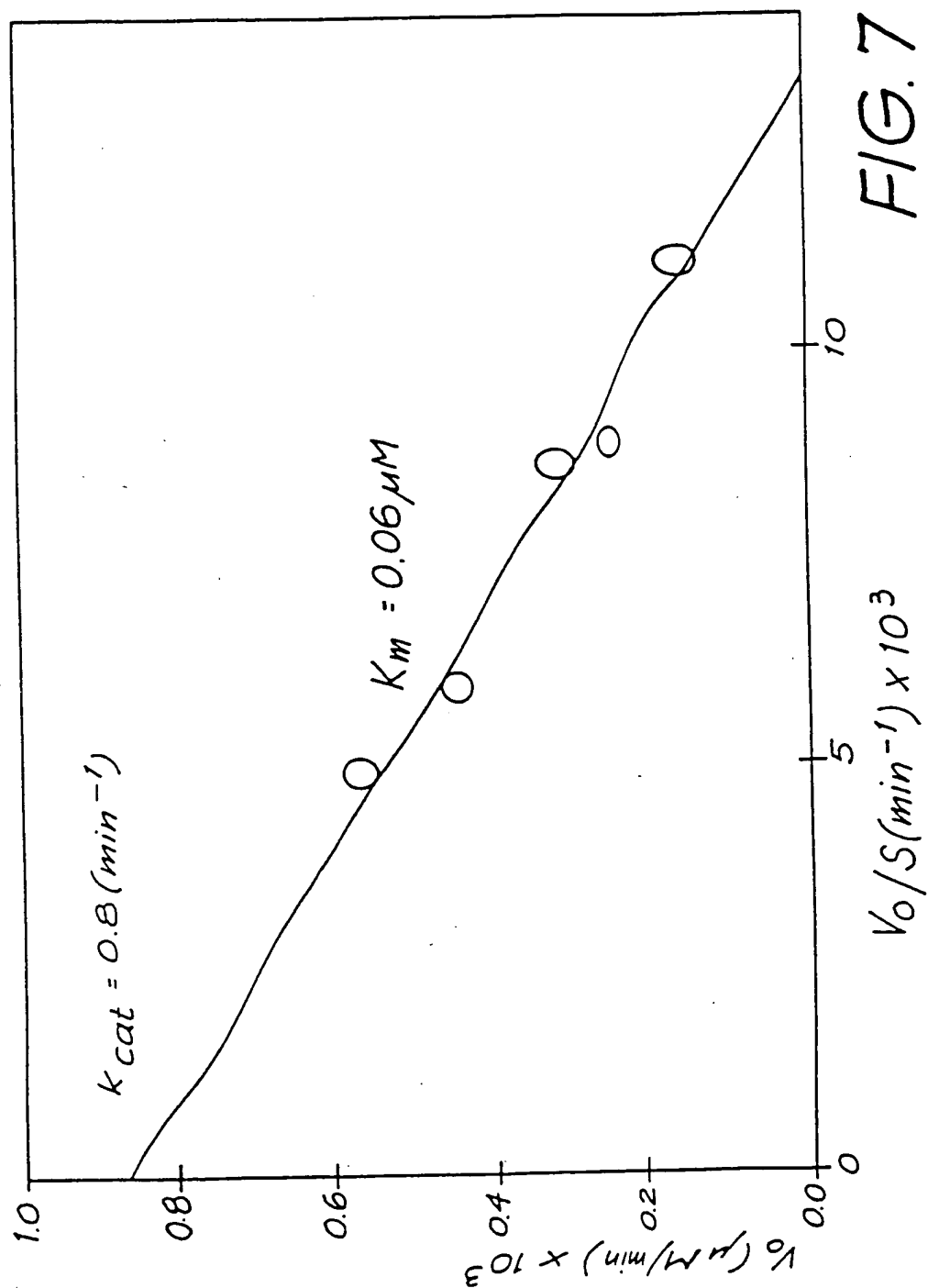


FIG. 7

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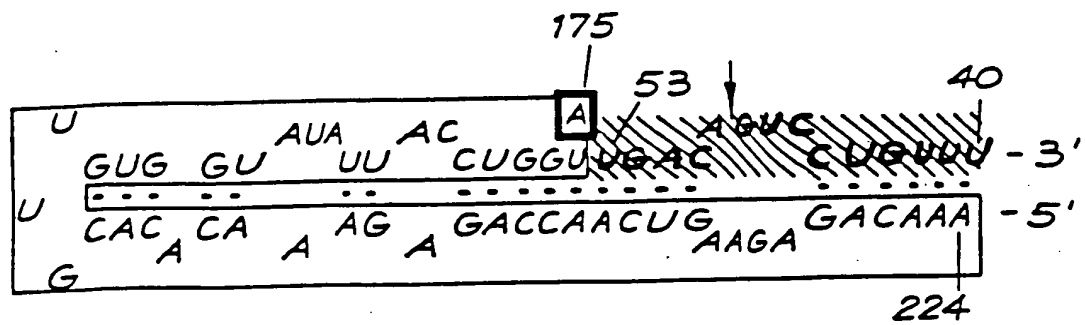


FIG. 8A

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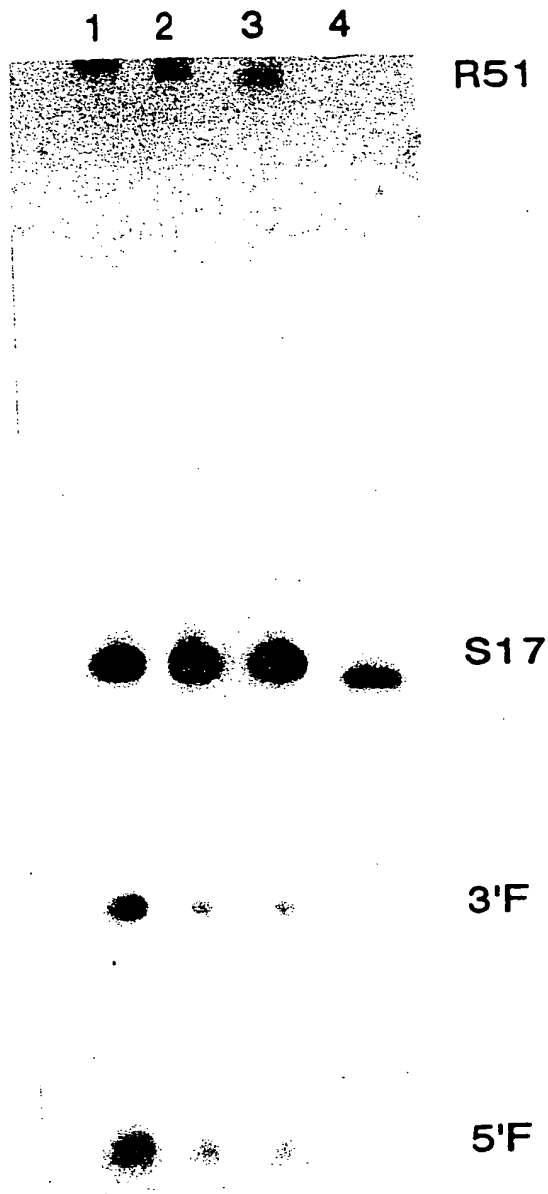


FIG. 8B

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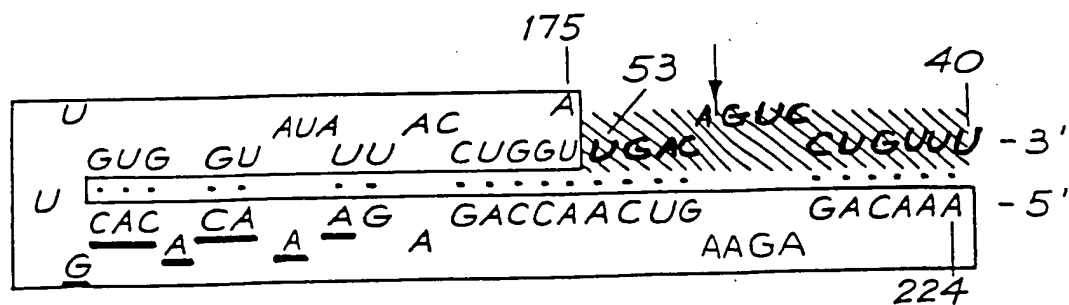


FIG. 9

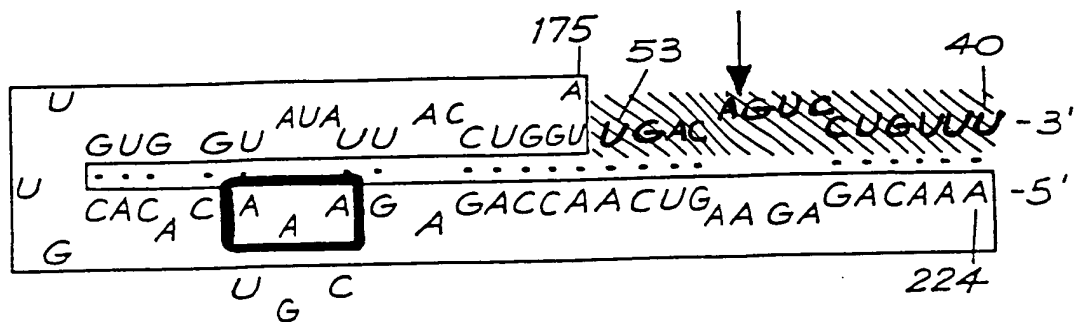


FIG. 10

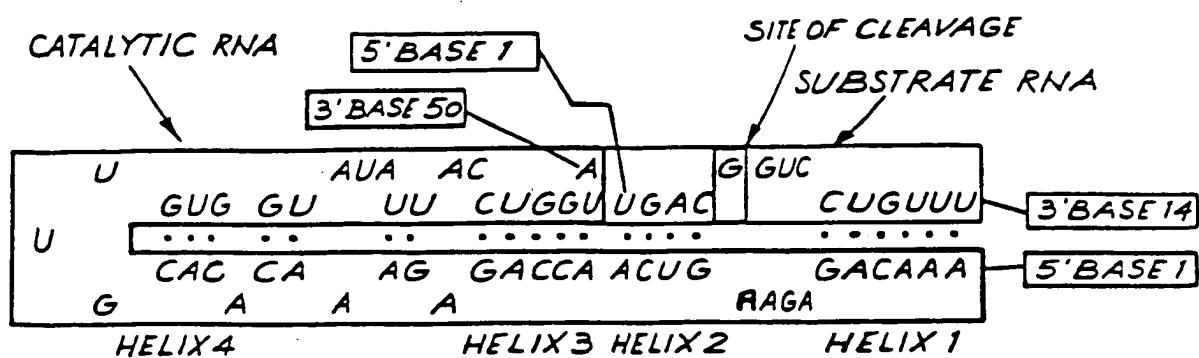


FIG. 11A-1

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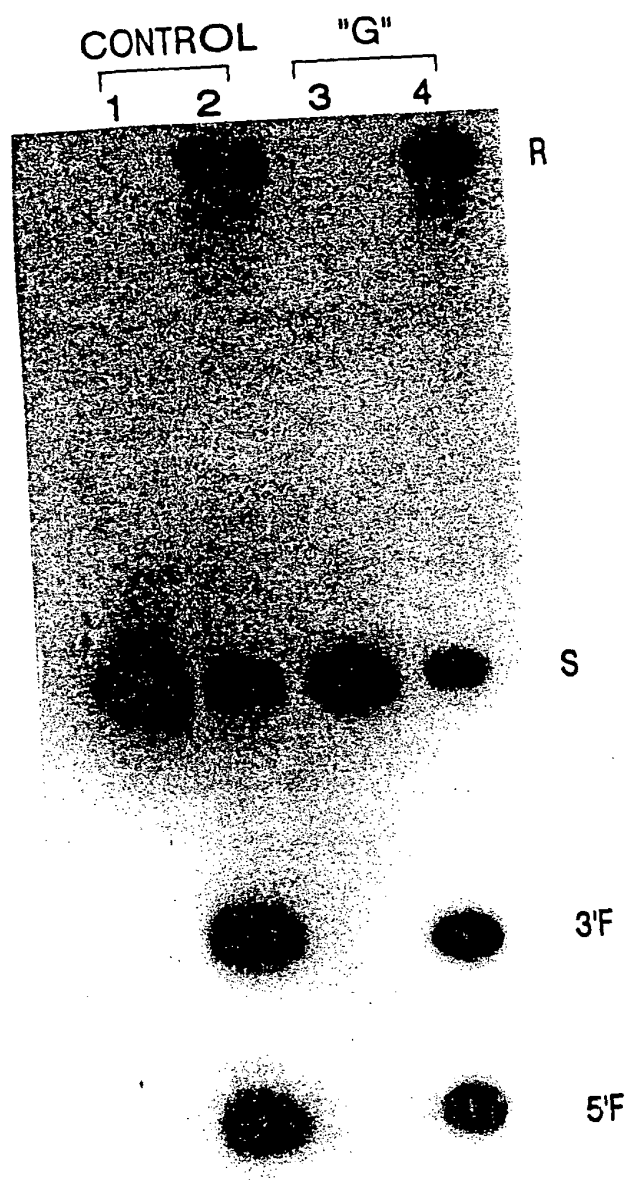


FIG. 11A-2

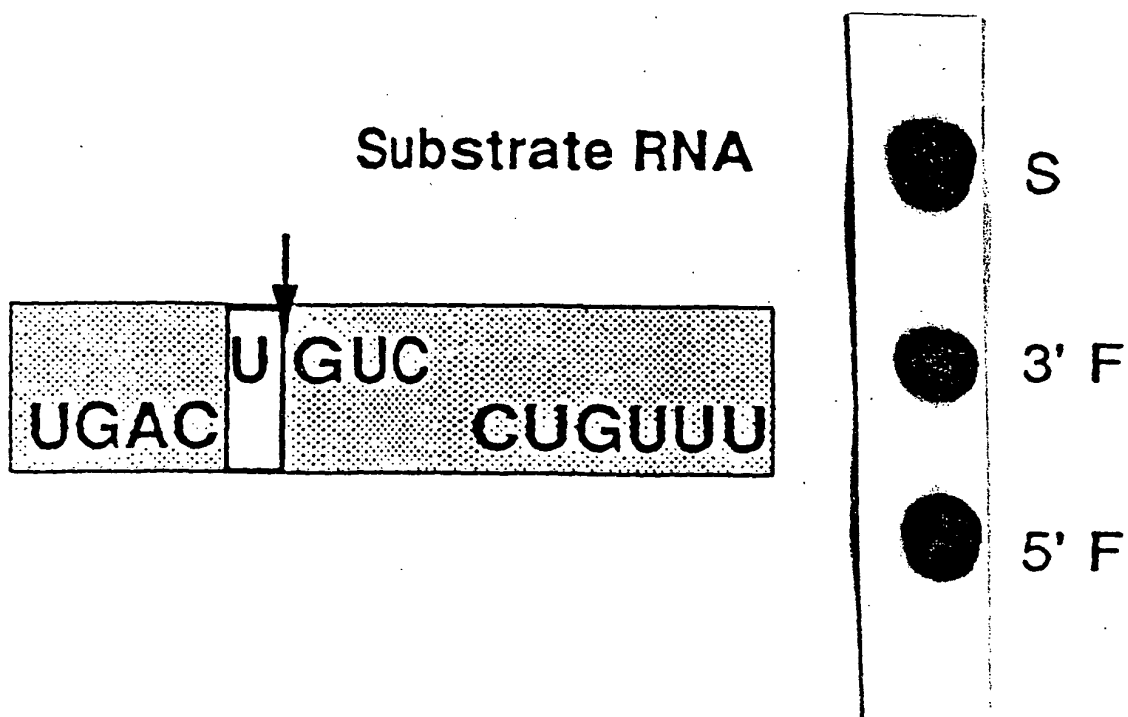


FIG. 11B-1

FIG. 11B-2

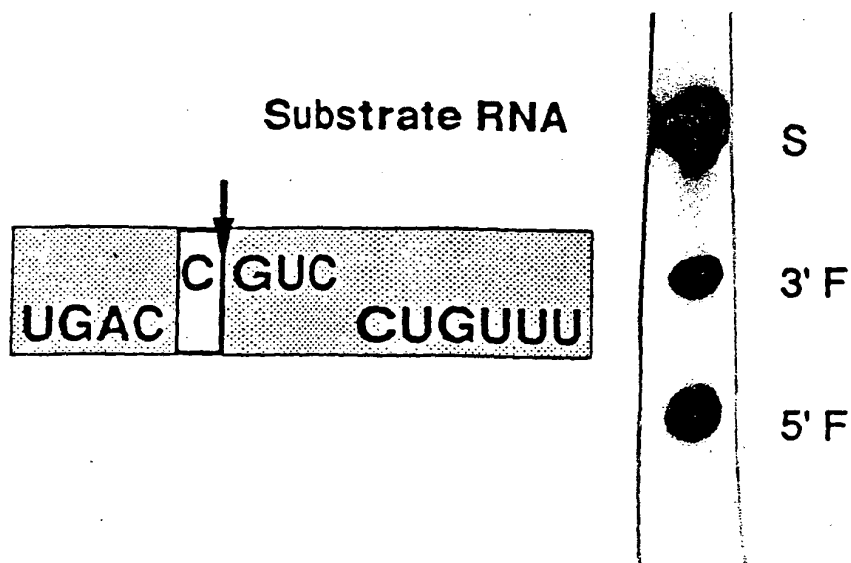


FIG. 11C-1

FIG. 11C-2

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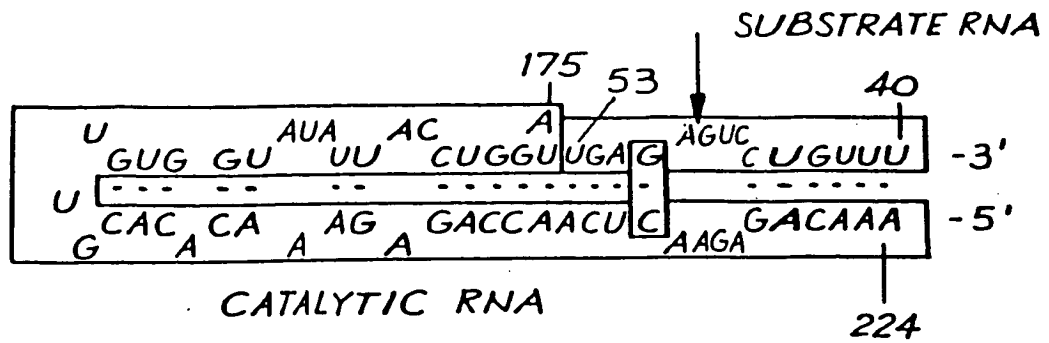
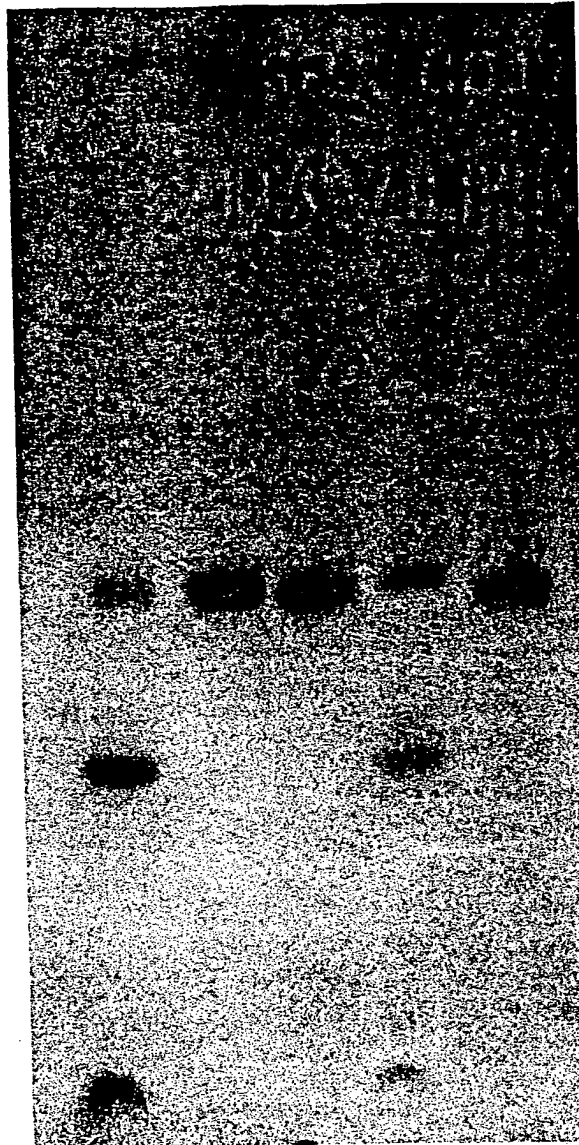


FIG. 12A

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1 2 3 4 5



CATALYTIC RNA

SUBSTRATE RNA

3'F

5'F

FIG. 12B

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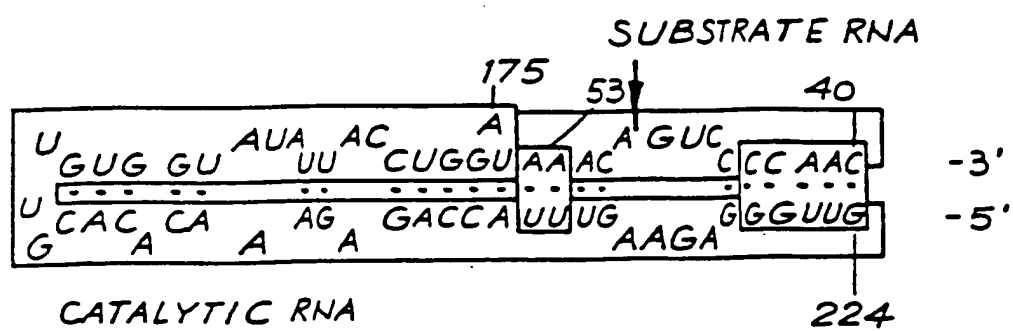


FIG. 13A

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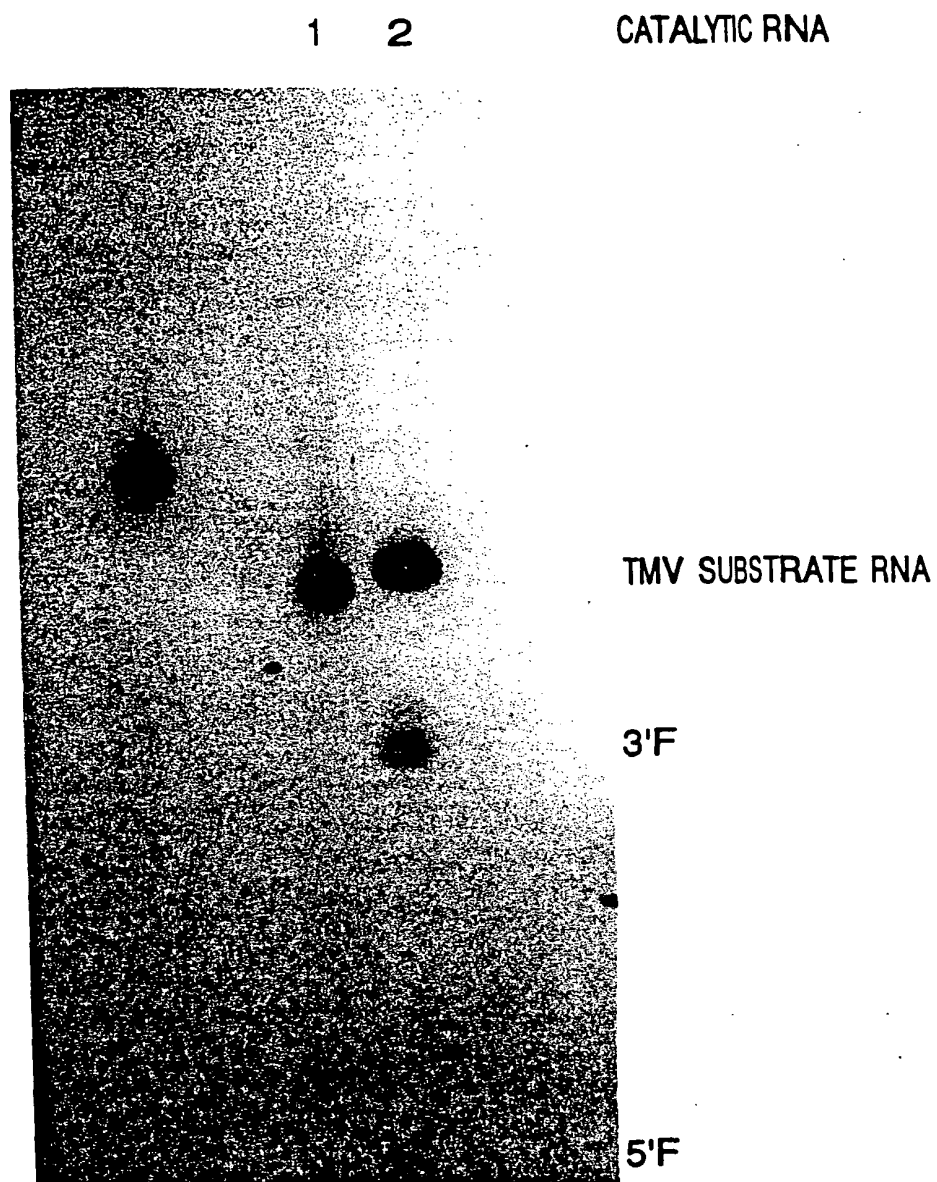


FIG. 13B

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Substrate RNA

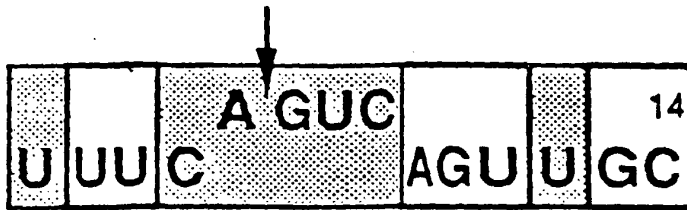


FIG. 14A-1

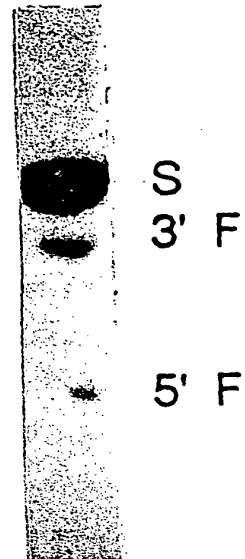


FIG. 14A-2

Substrate RNA

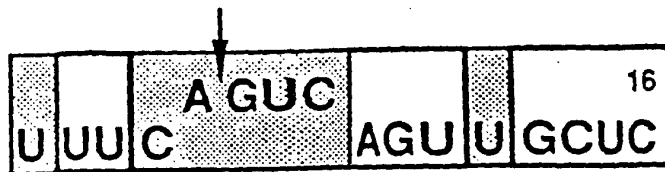


FIG. 14B-1

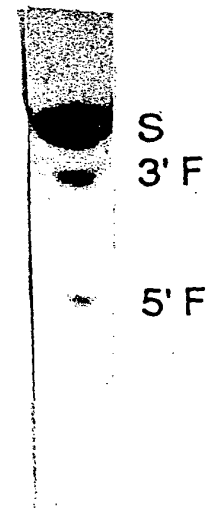
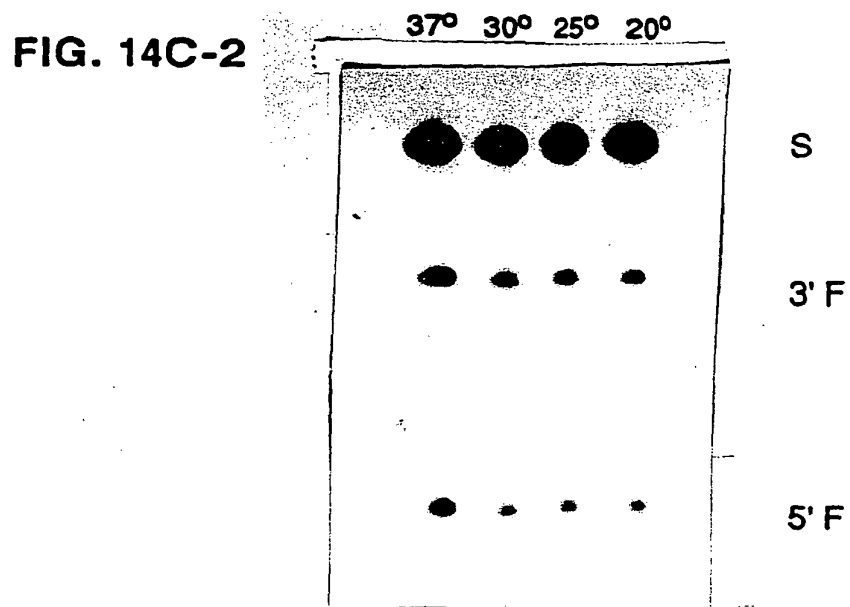
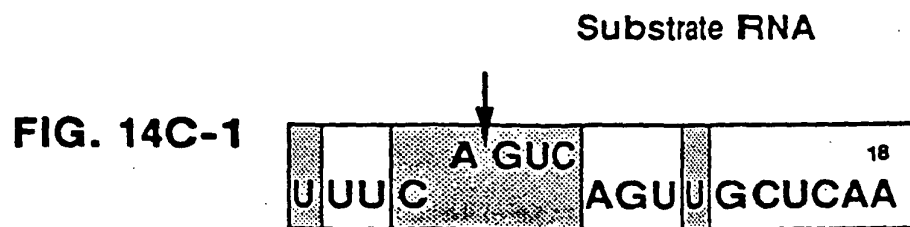


FIG. 14B-2

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HIV 804

Substrate RNA



FIG. 15A

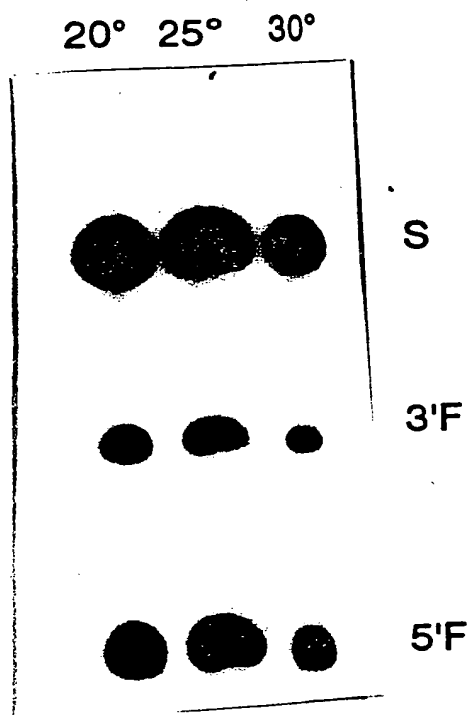


FIG. 15B

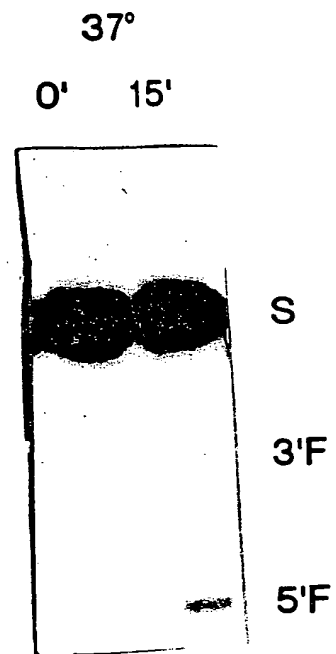


FIG. 15C

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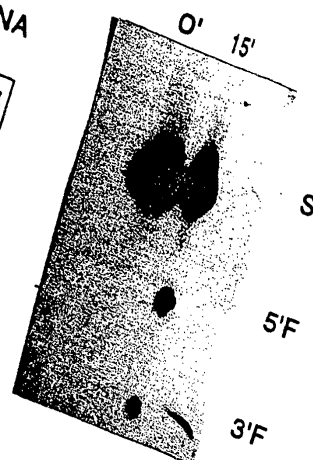
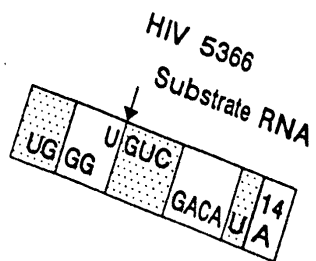
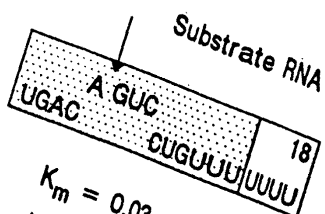


FIG. 16A

FIG. 16B



$K_m = 0.03 \mu\text{m}$
 $k_{cat} = 7/\text{min}$

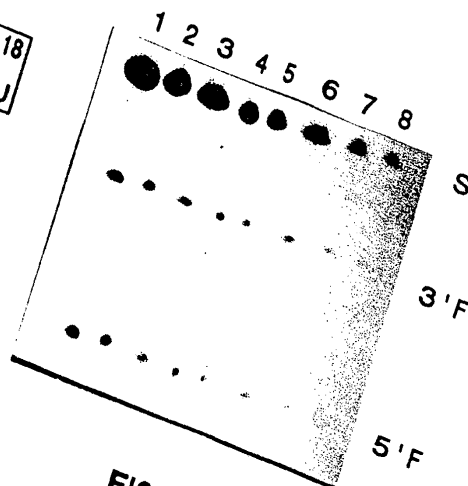


FIG. 17A

FIG. 17B

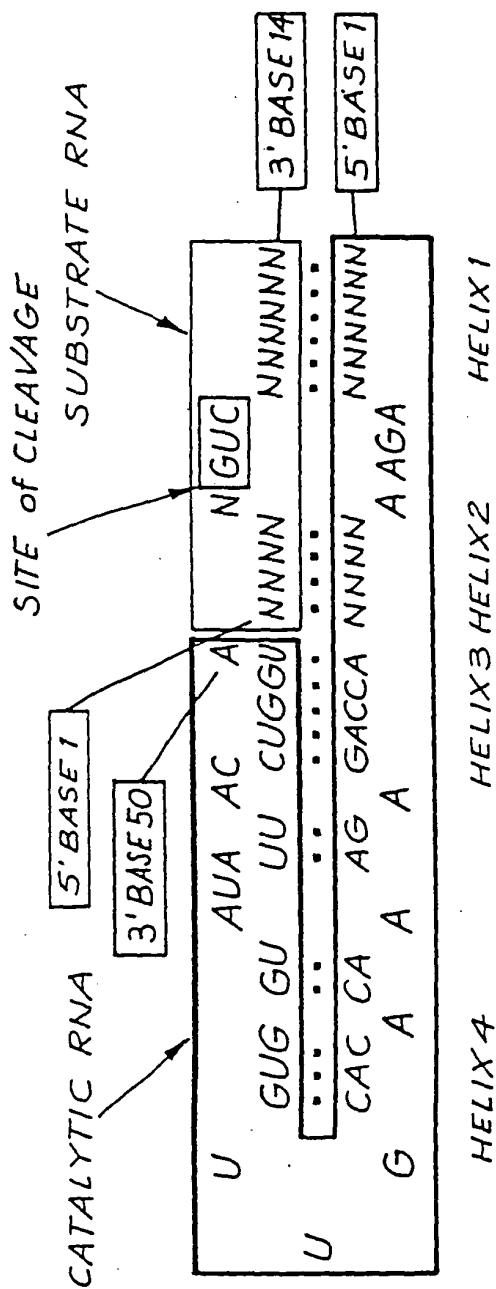


FIG. 18

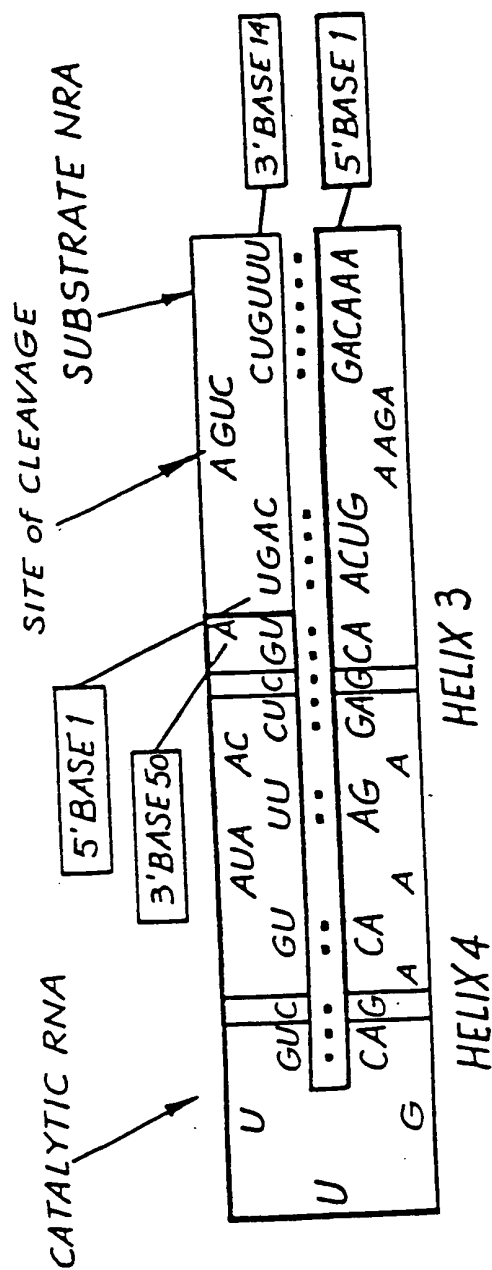


FIG. 19A

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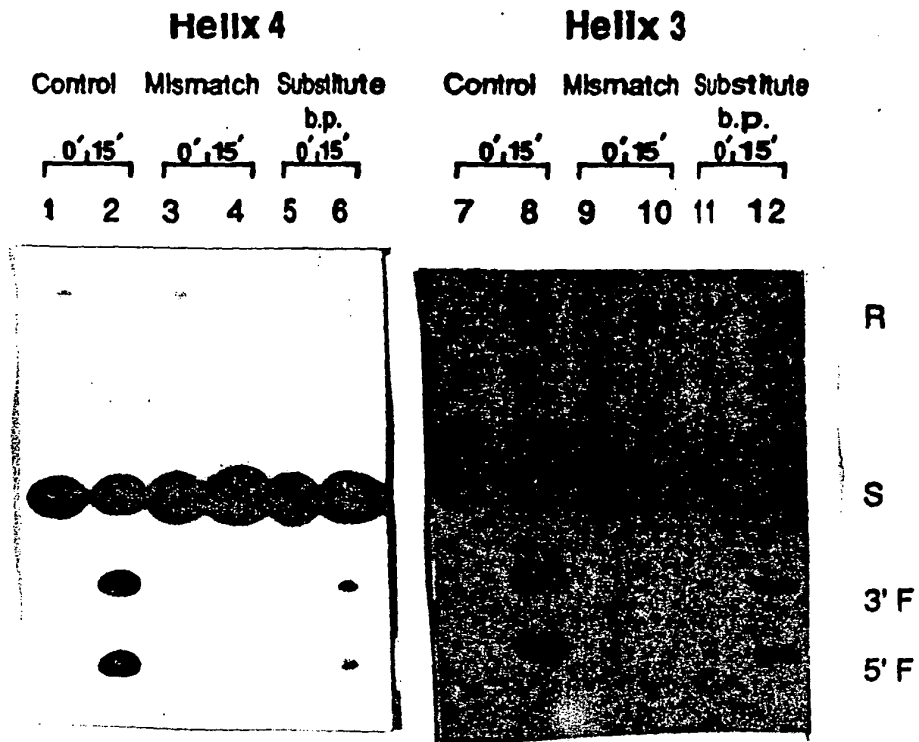


FIG.19B

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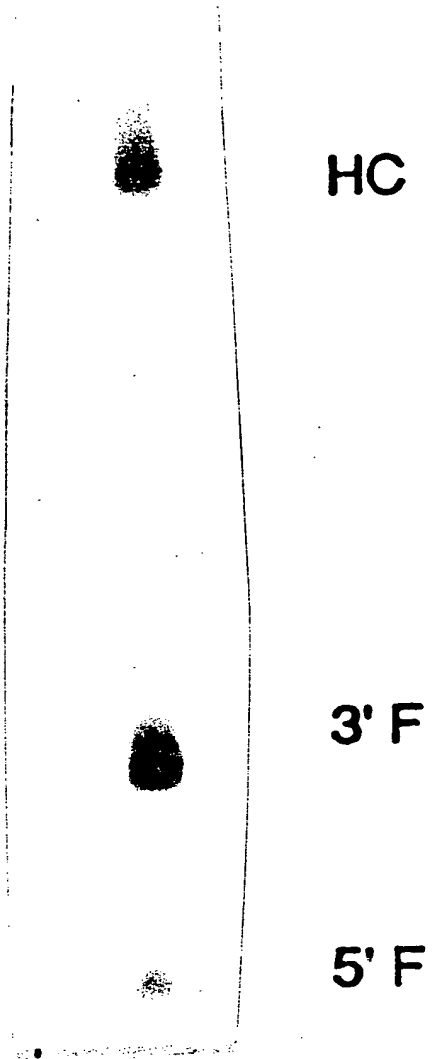


FIG. 20B

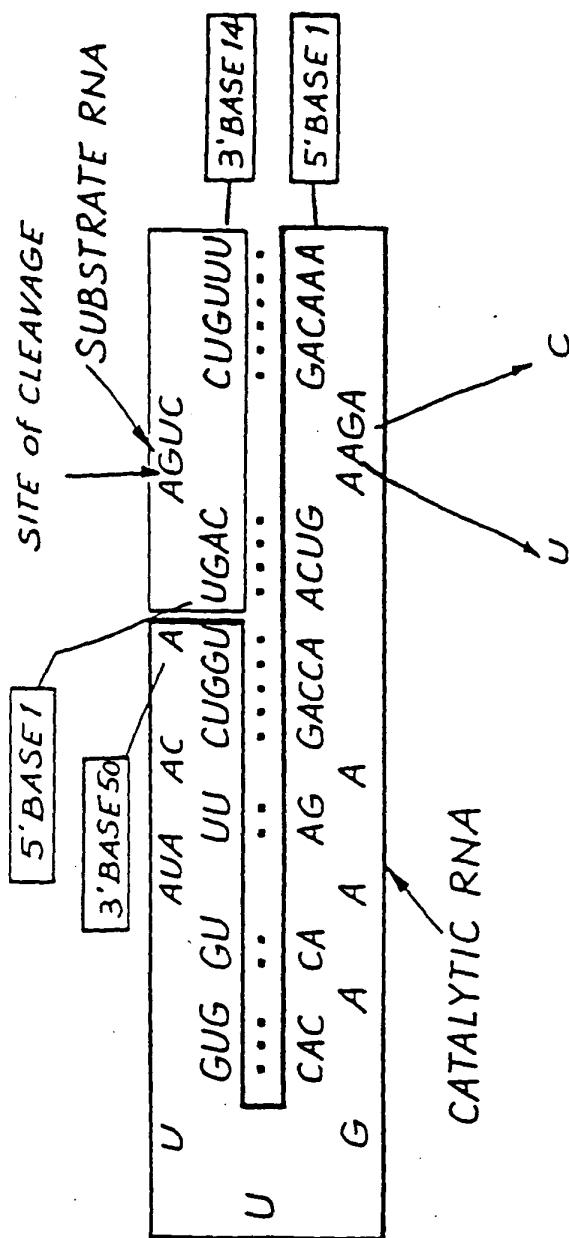


FIG. 21A

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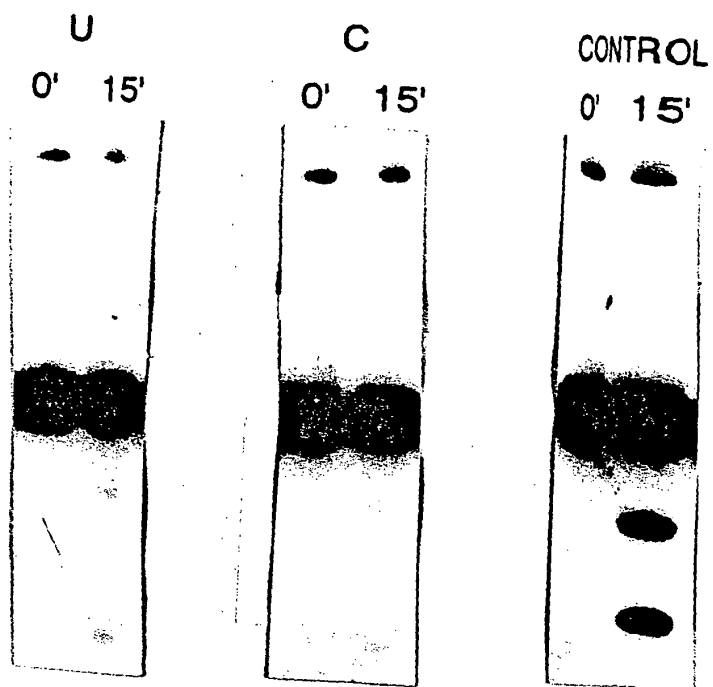
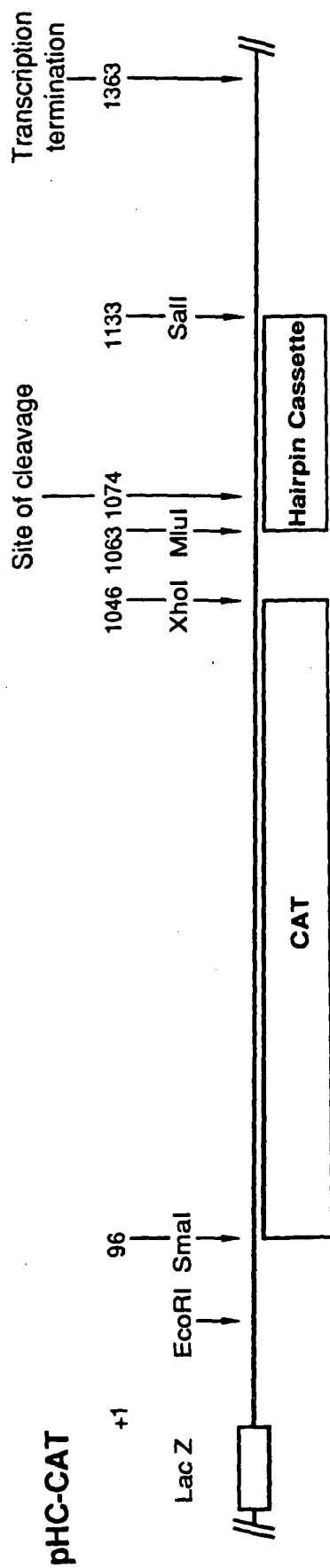
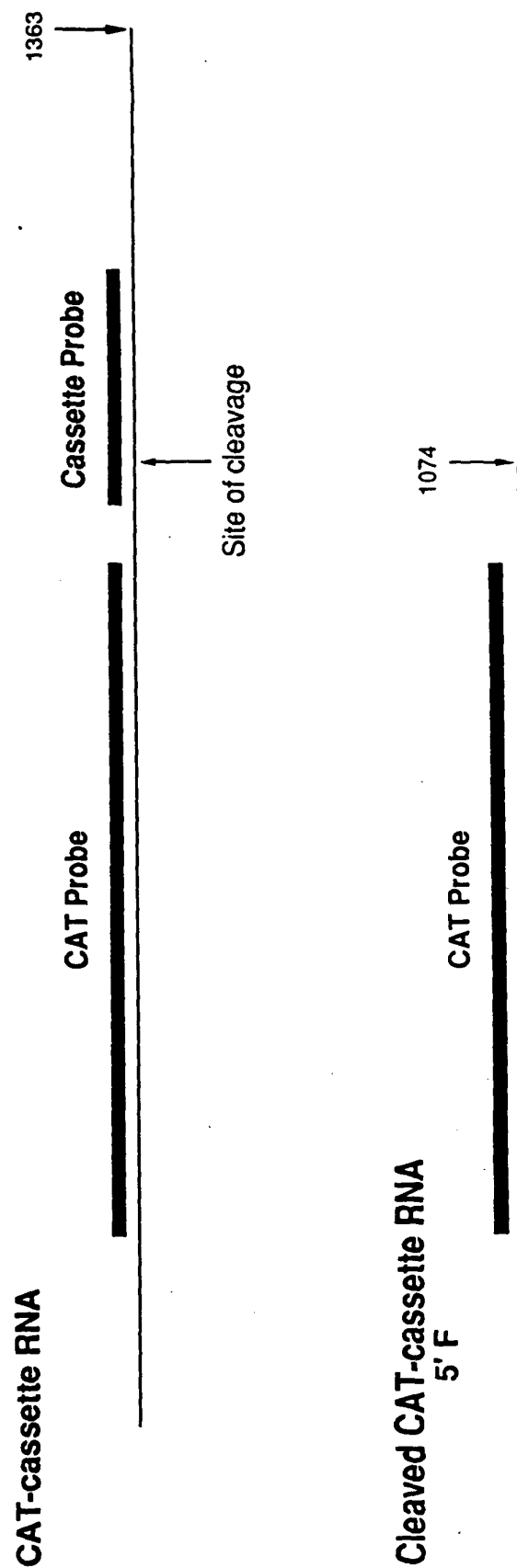


FIG. 21B

FIG. 22A



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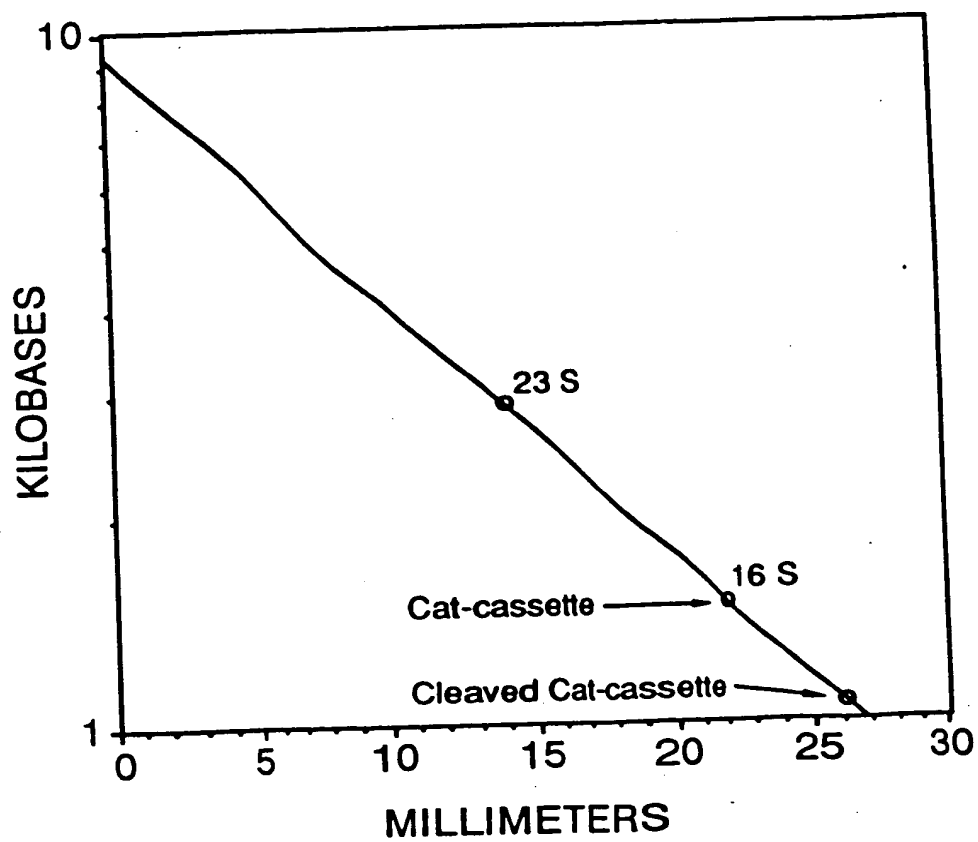


FIG. 22B-1

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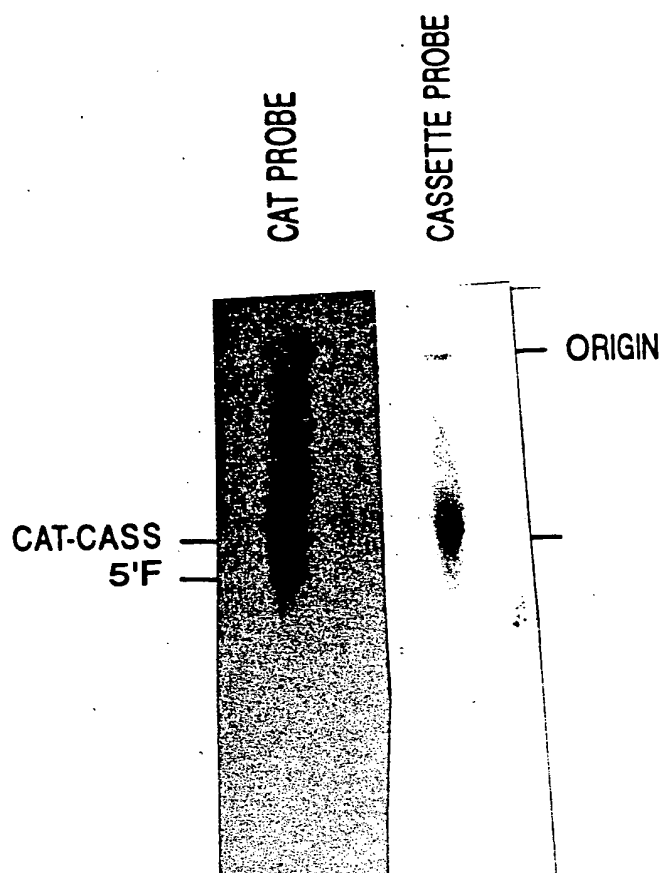


FIG. 22B-2

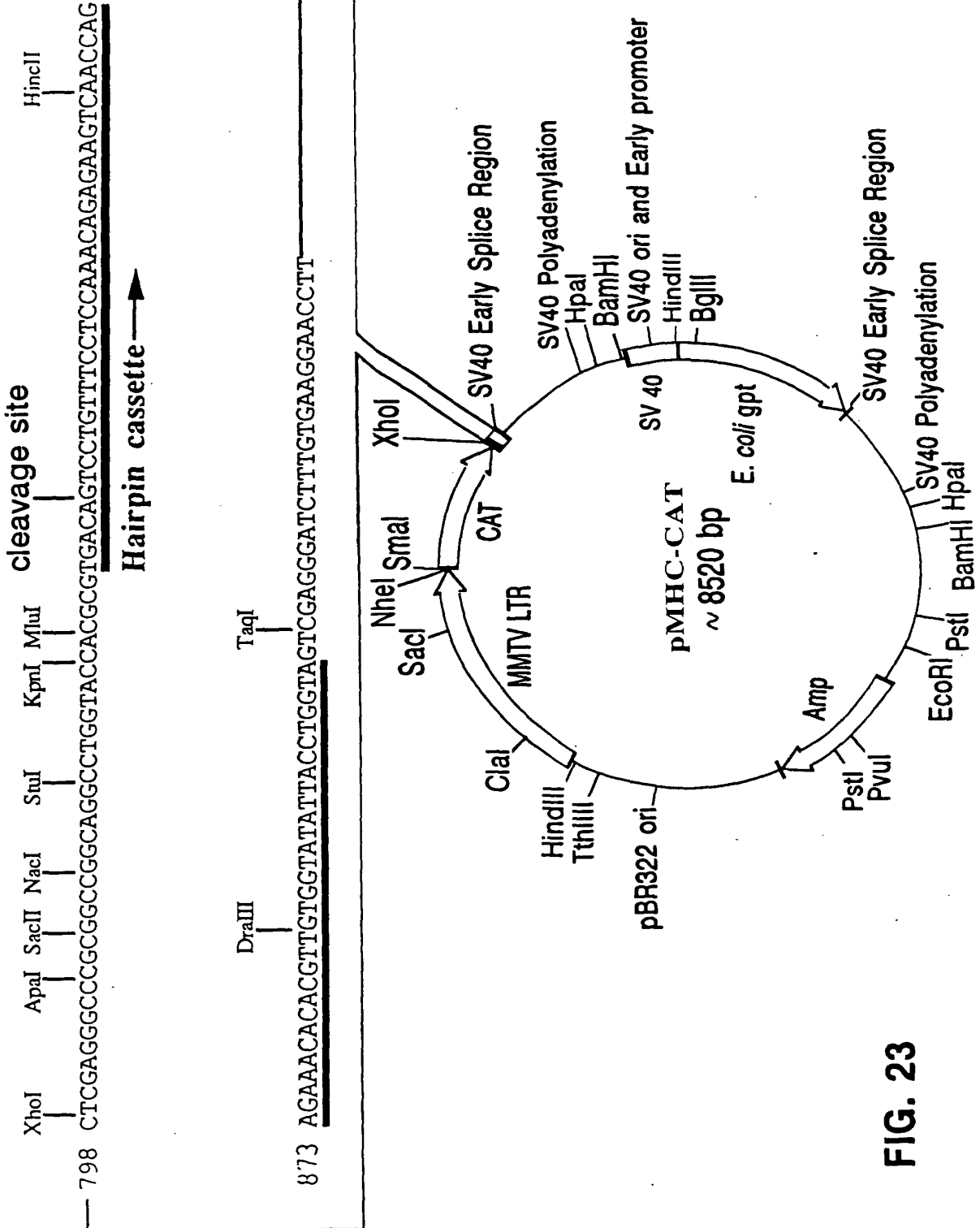


FIG. 23

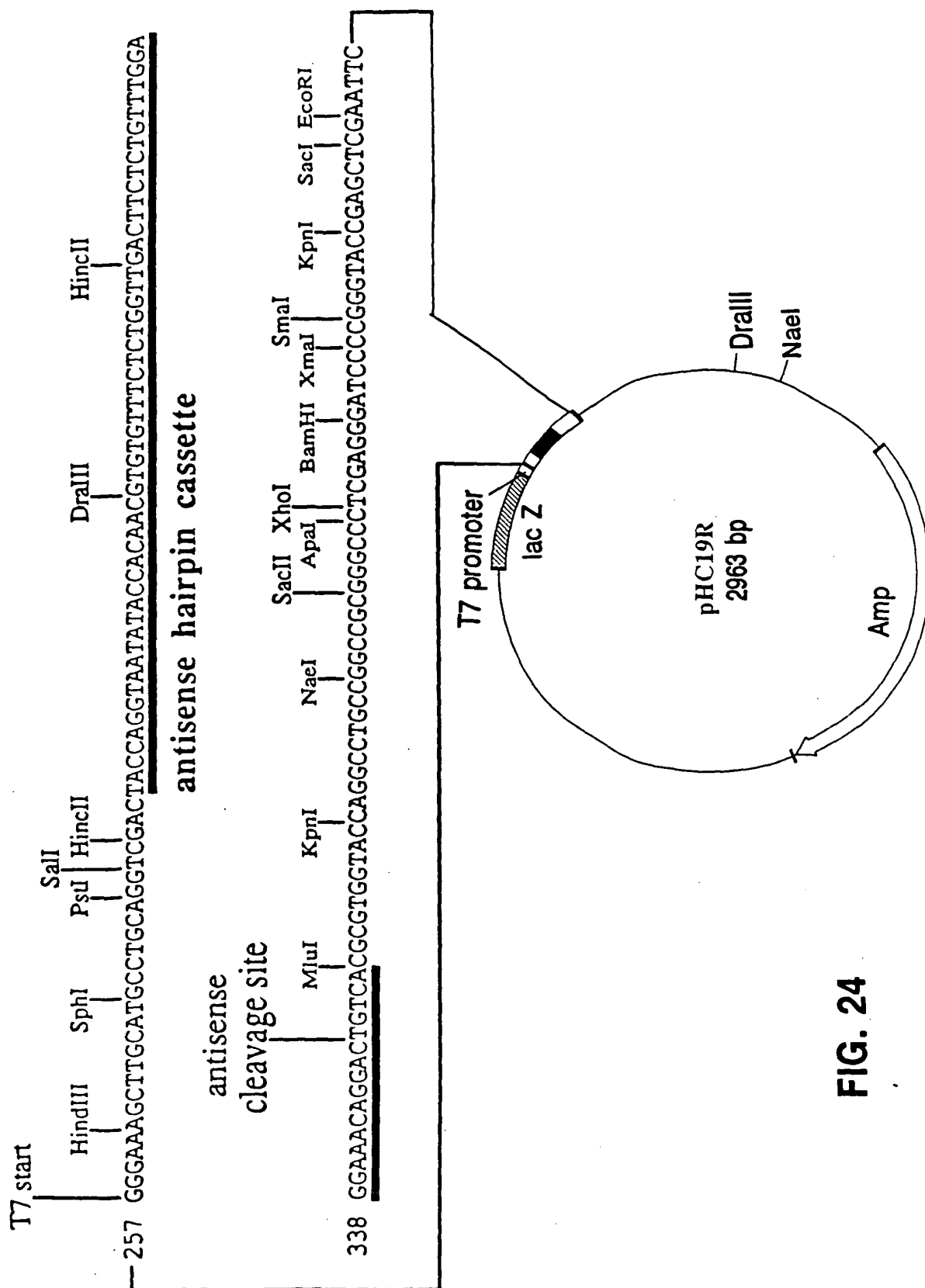


FIG. 24

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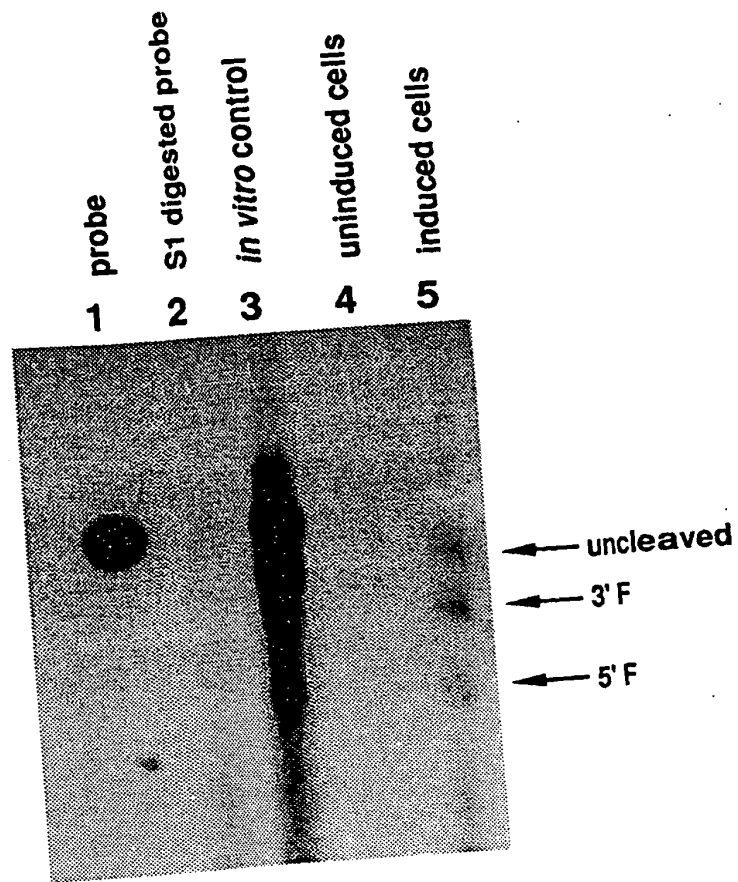
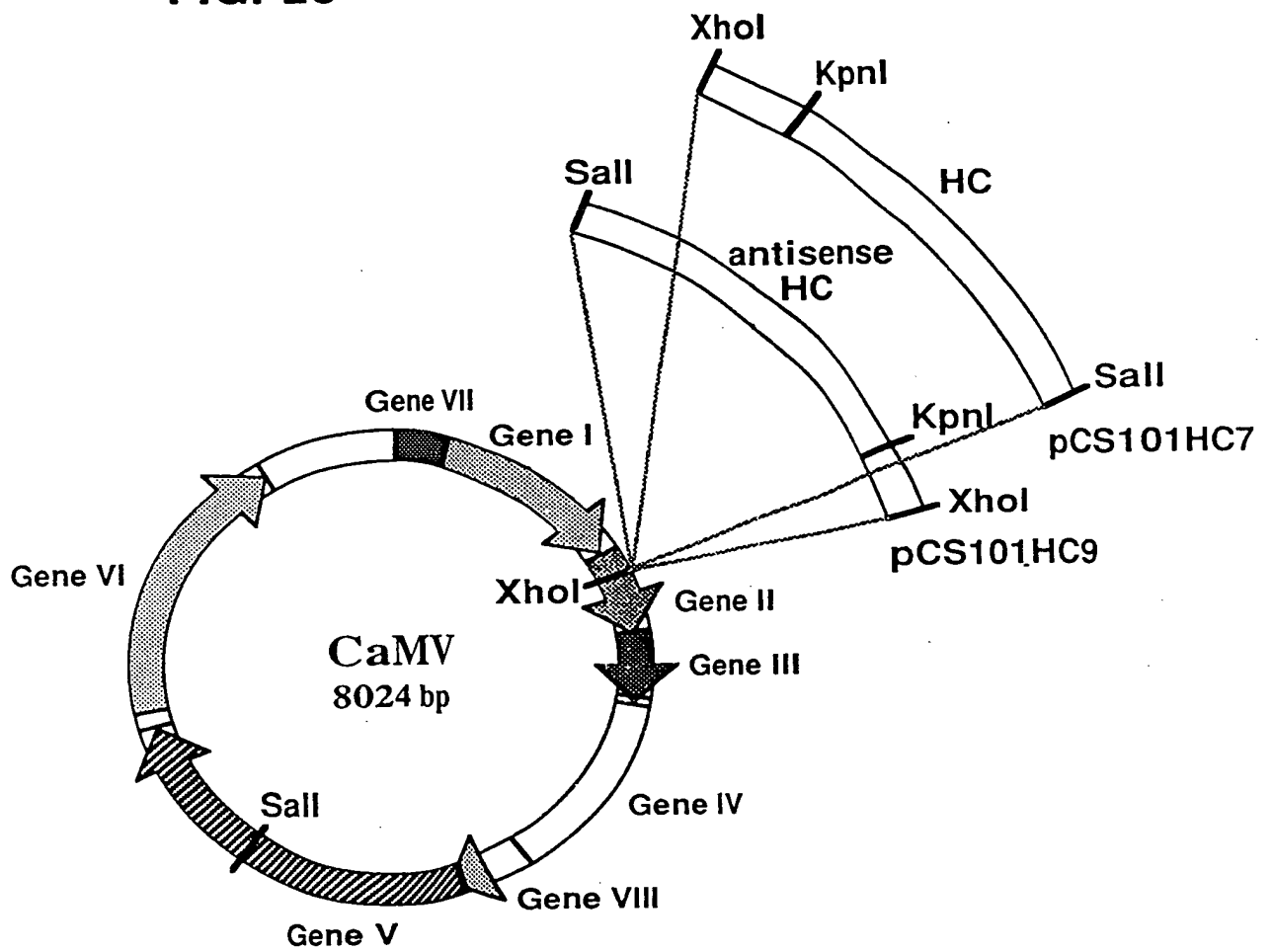


FIG. 25

FIG. 26



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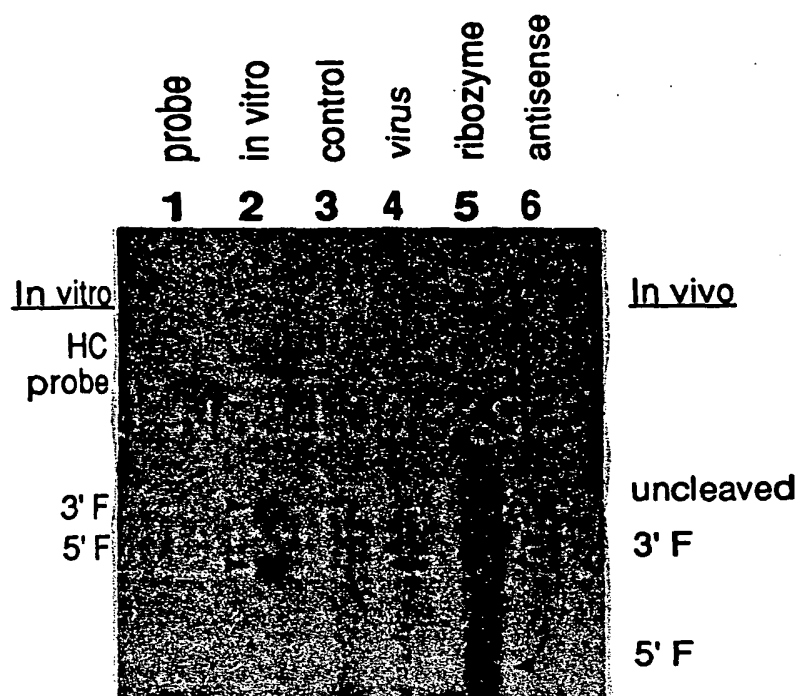


FIG. 27A

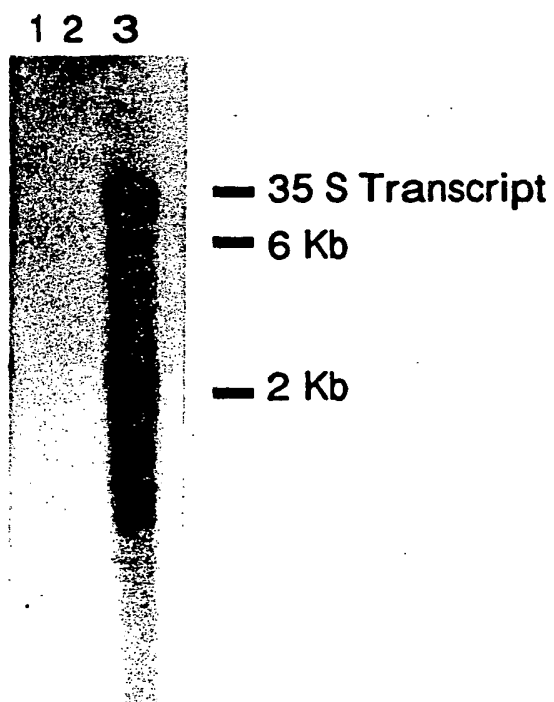


FIG. 27B

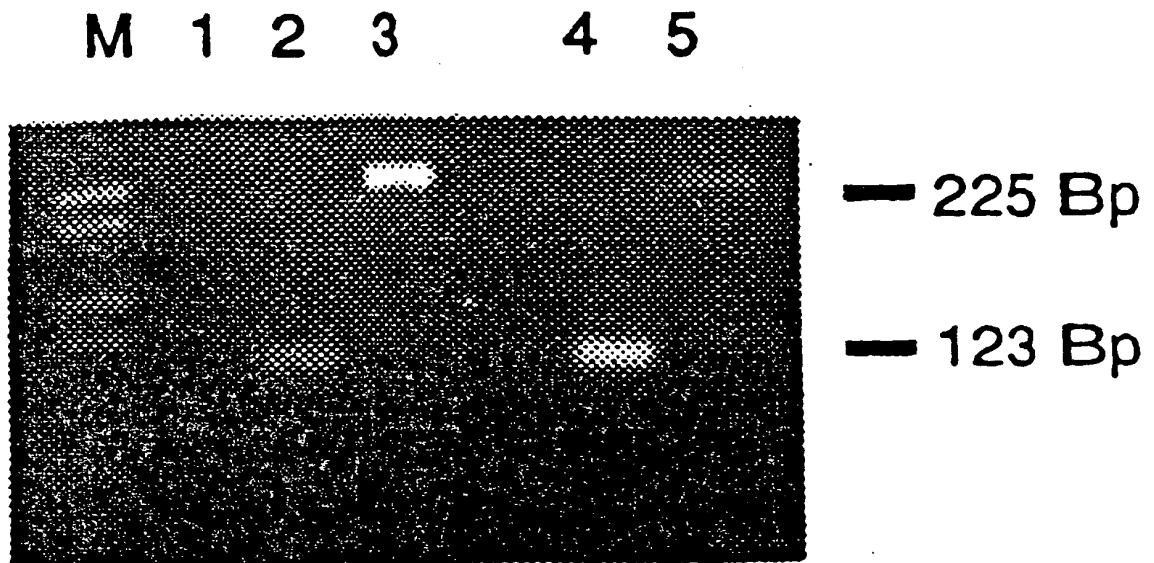


FIG. 27C

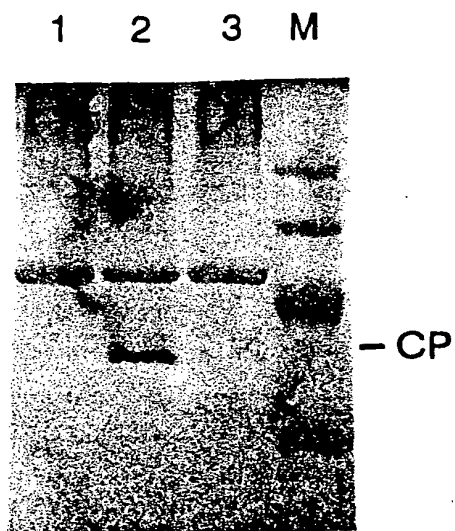


FIG. 27D

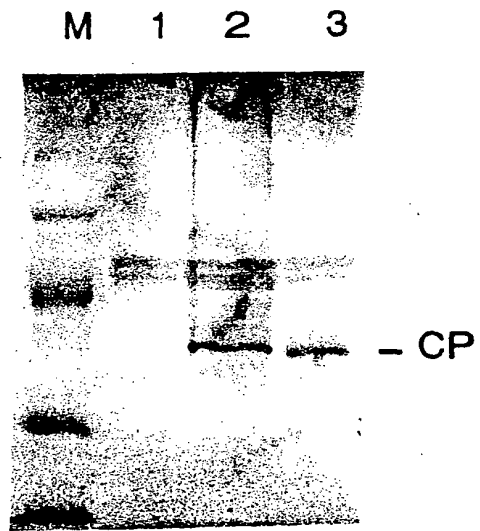


FIG. 27E

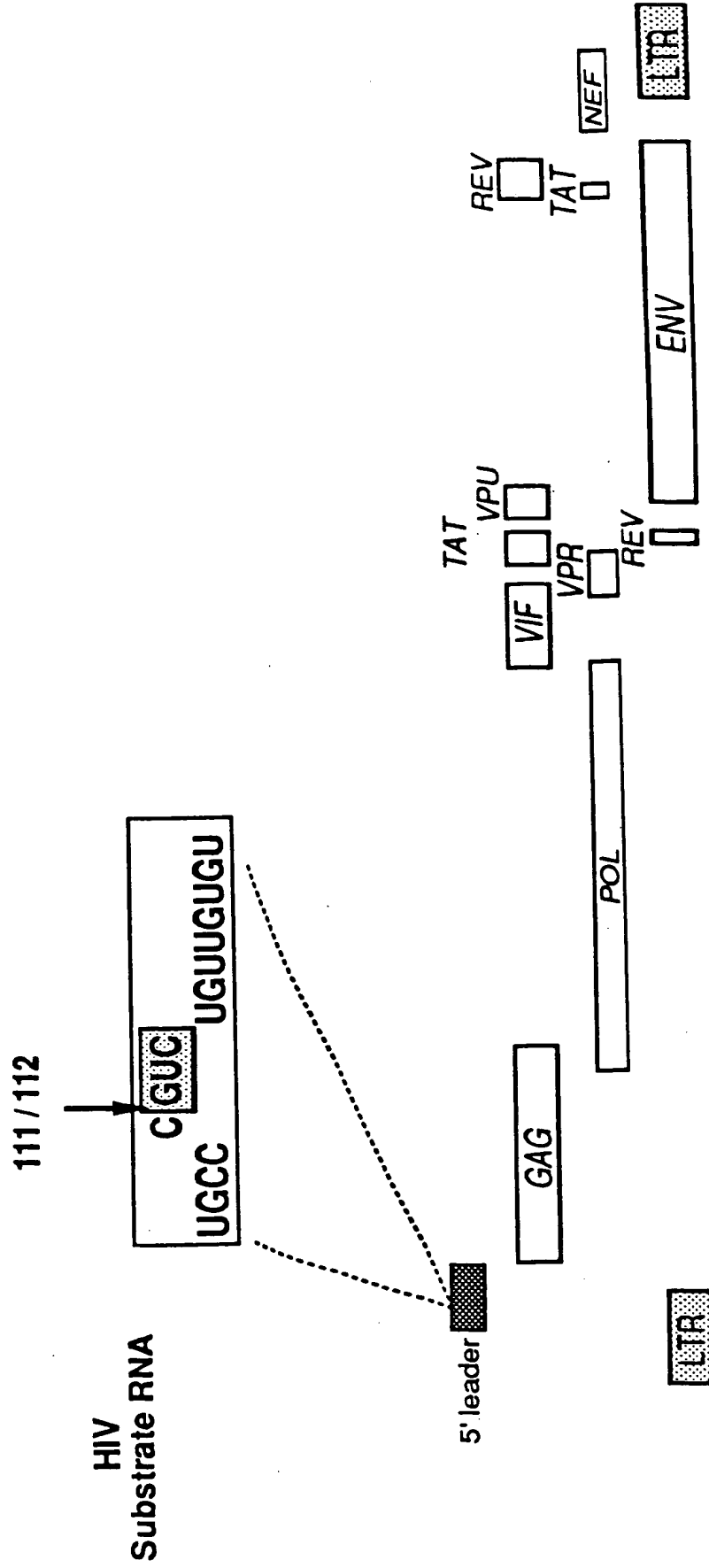


FIG. 28

FIG. 29

HIV-1		capsite: LENGTH:																
HXB2	cg	561	TG	CCC	GTC	TGT	TGT	GT	9645	TG	CCC	GTC	TGT	TGT	GT	455,	9539	9718
HXB3		---							---							---	---	3156
PV22	cg	570	TG	CCC	GTC	TGT	TGT	GT	9688	TG	CCC	GTC	TGT	TGT	GT	464,	9582	9770
SF2	cg	561	TG	CCC	GTC	TGT	TGT	GT	9662	TG	CCC	GTC	TGT	TGT	GT	455,	9556	9737
RF	cg	75	TG	CCC	GTC	TGT	TGT		---						---	9091	9128	
MN	cg	560	TG	CCC	GTC	TGT	TaT	GT	9665	TG	CCC	GTC	TGT	TaT	GT	454,	9559	9738
MAL	cg	105	TG	CCC	aTC	TGT	TGT		---						1,	9134	9229	
ELI	cg	107	TG	CCC	GTC	TGT	TGT		---						1,	9079	9176	
NL43	cg	561	TG	CCC	GTC	TGT	TGT	GT	9636	TG	CCC	GTC	TGT	TGT	GT	455,	9530	9709
Z2	cg	561	TG	CCC	GTC	TGT	TGT		---						455,	---	9081	
Z6		---							5012	TG	CCC	GTC	TGT	TGT	GT	---	4906	5159
CDC451-1		559	TG	CCC	GTC	TGT	TGT	GT	---						453,	---	2438	
CDC451-2		---							---						---	---	3373	
BRVA		---							---						---	---	3600	
BH5		---							---						---	---	5362	
BH8		---							---						---	---	3563	
BH10		---							---						---	---	8932	
JH3-1	cg	75	TG	CCC	GTC	TGT	TGT	GT	---						---	---	1897	
JH3-2		---							---						---	---	2903	
NY5		---							---						---	---	2125	
PCV12		---							---						---	2207	2304	
POLMA		---							---						---	---	861	
SC		---							---						---	4250	4273	
WMJ2-1		---							---						---	---	1278	
WMJ2-2		---							---						---	---	2568	
Z-84		---							---						---	---	2653	
Z3		---							---						---	---	2709	
Z321		---							---						---	3420	3457	
HIV-2 capsite sequence is (A/G)GT CCC TCT																		
ROD	cg	---							---							1,	9498	9671
ISY	cg	---							---							1,	9458	9636
HIV2FG	cg	---							---							1,	9255	9431

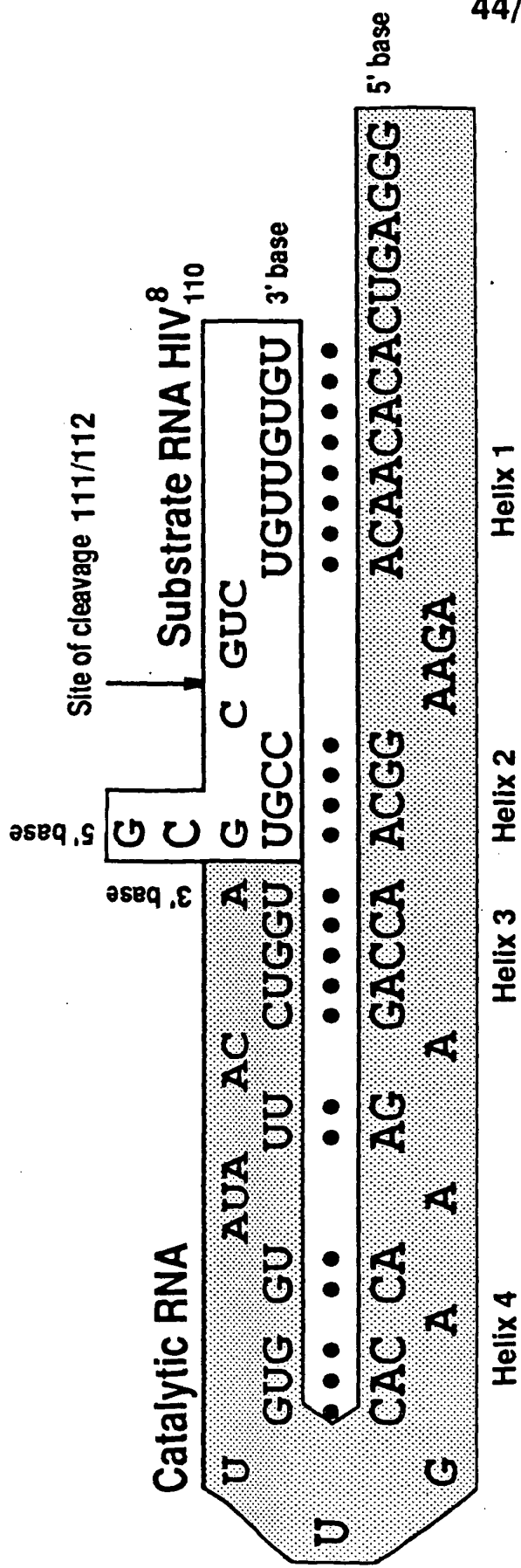


FIG. 30

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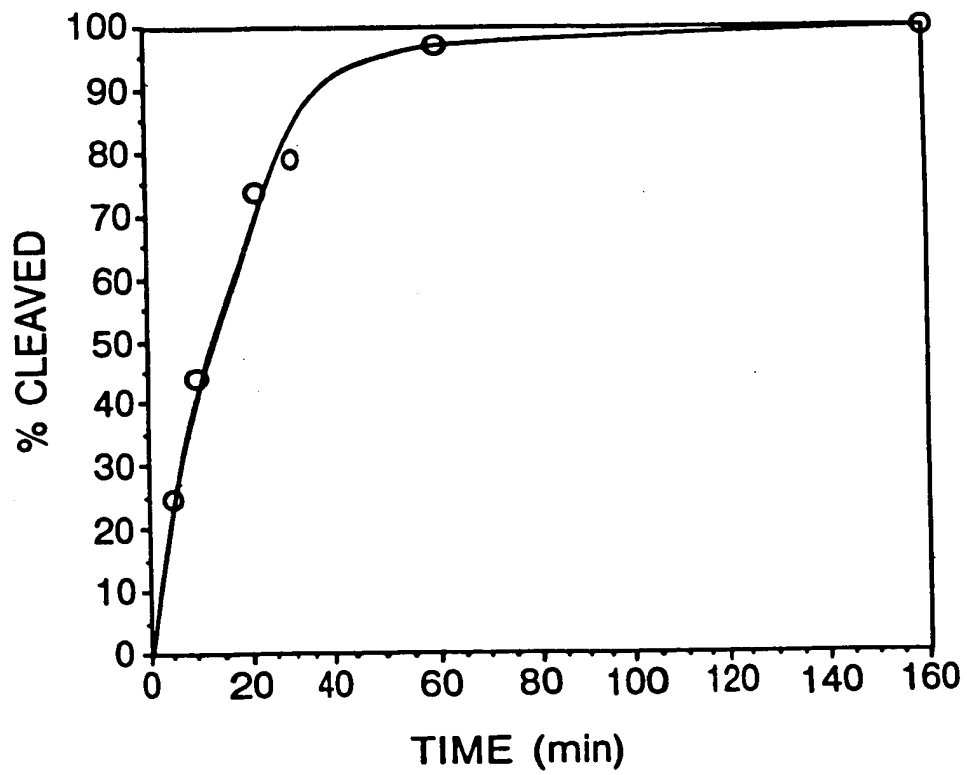


FIG. 31A

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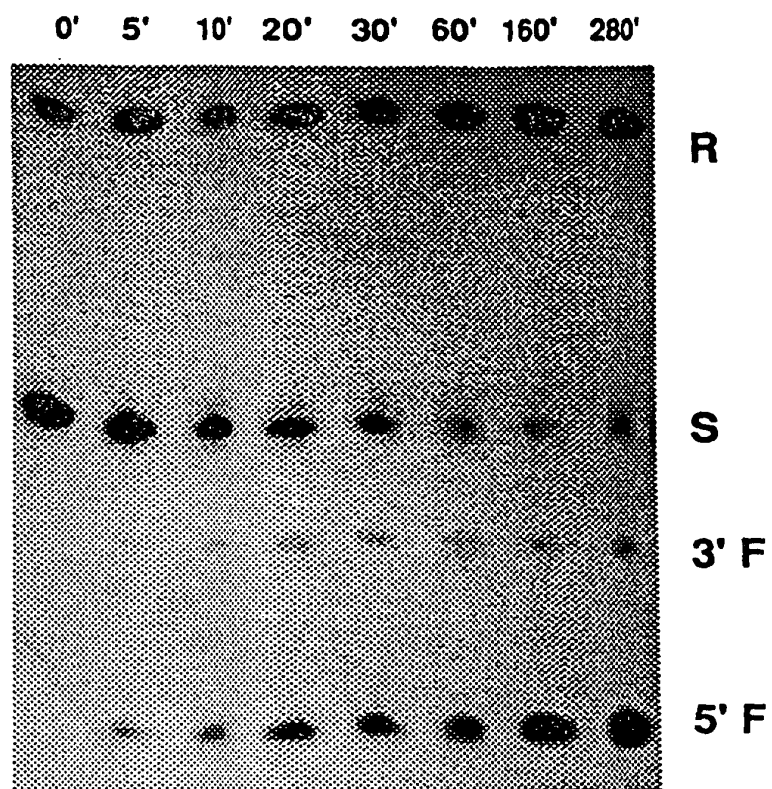


FIG. 31B

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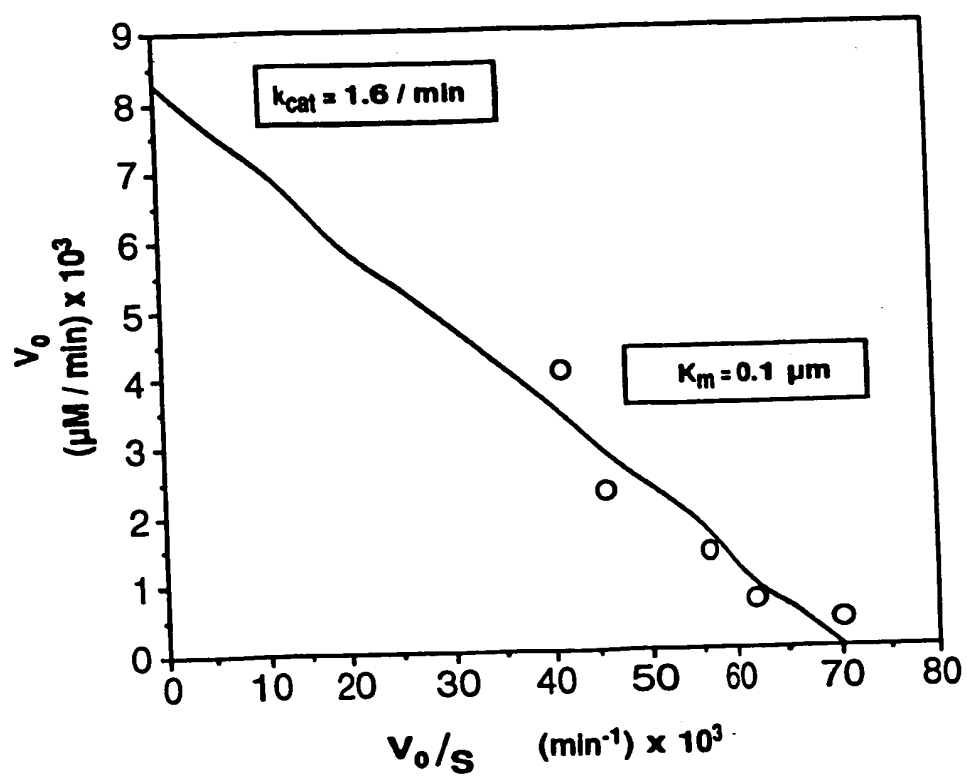


FIG. 32A

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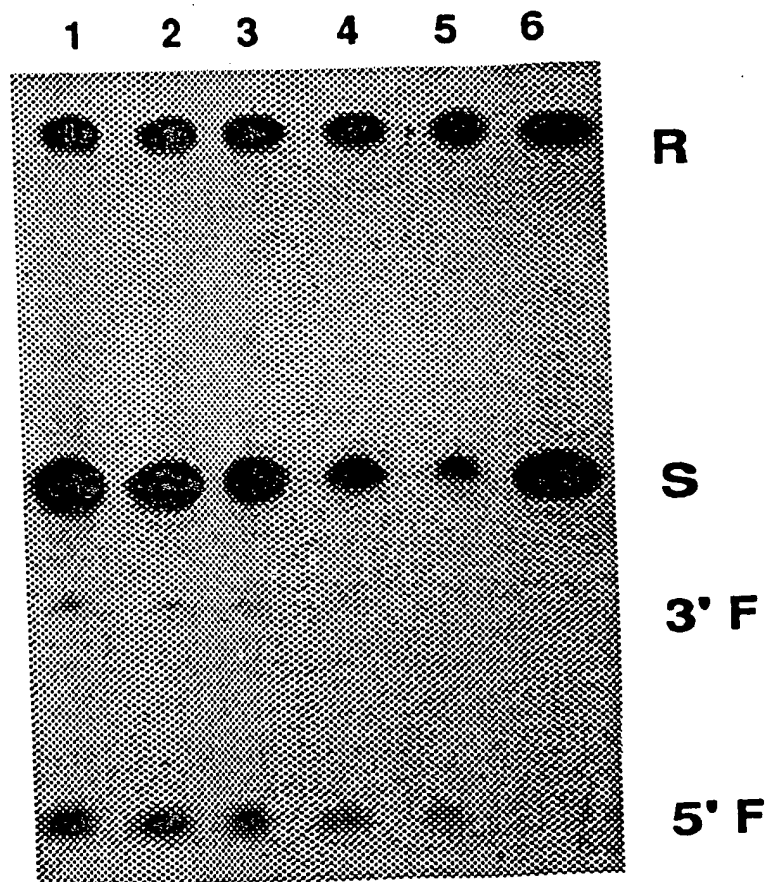


FIG. 32B

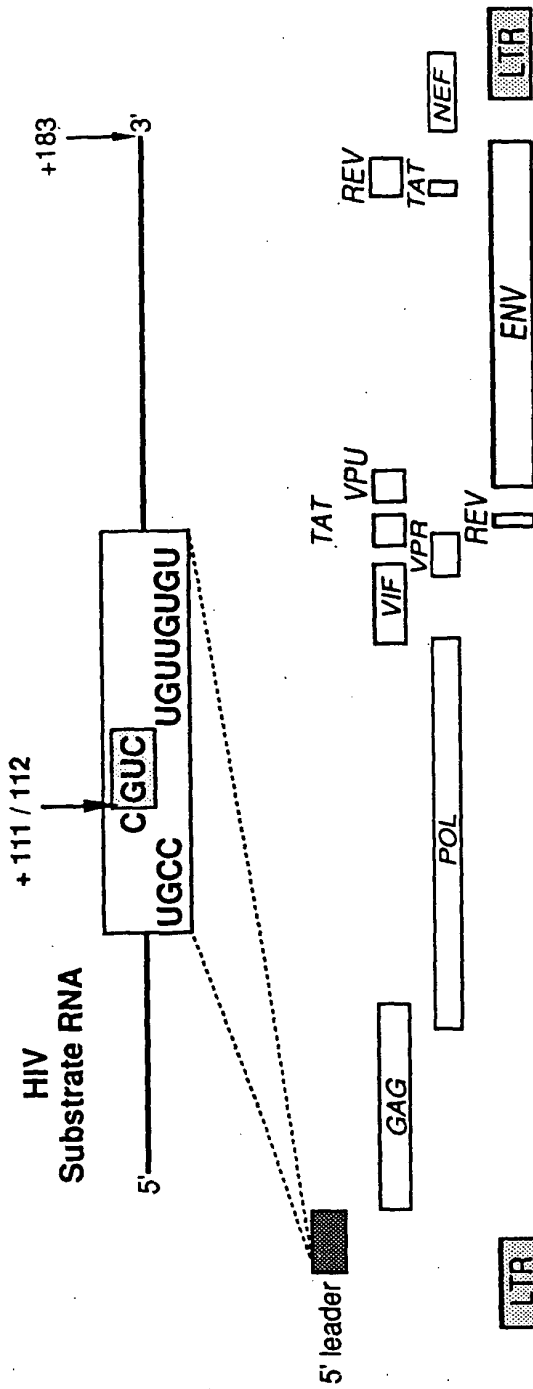


FIG. 33A

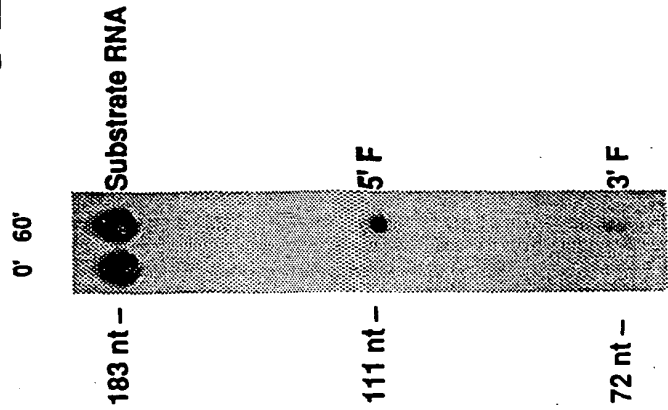


FIG. 33B

FIG. 34A

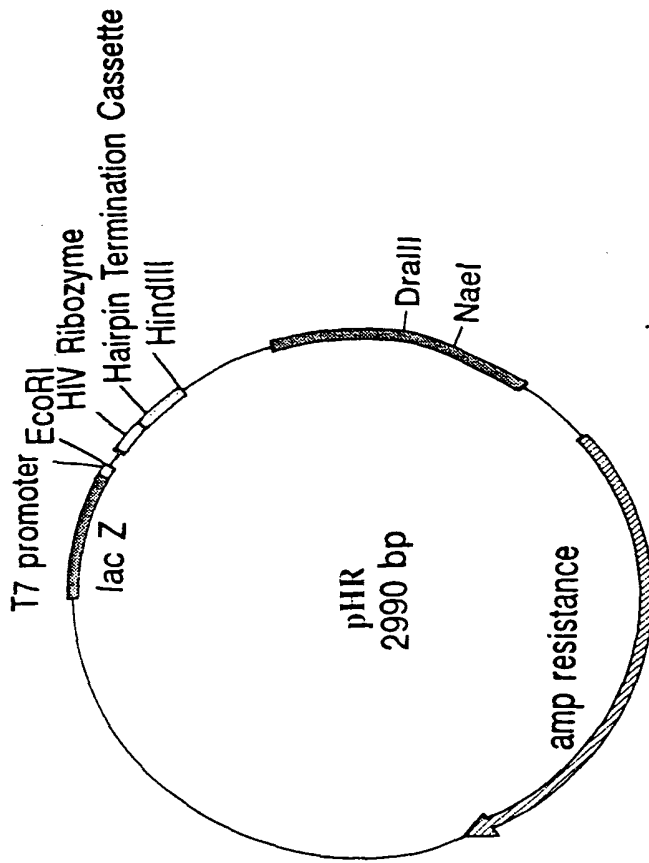
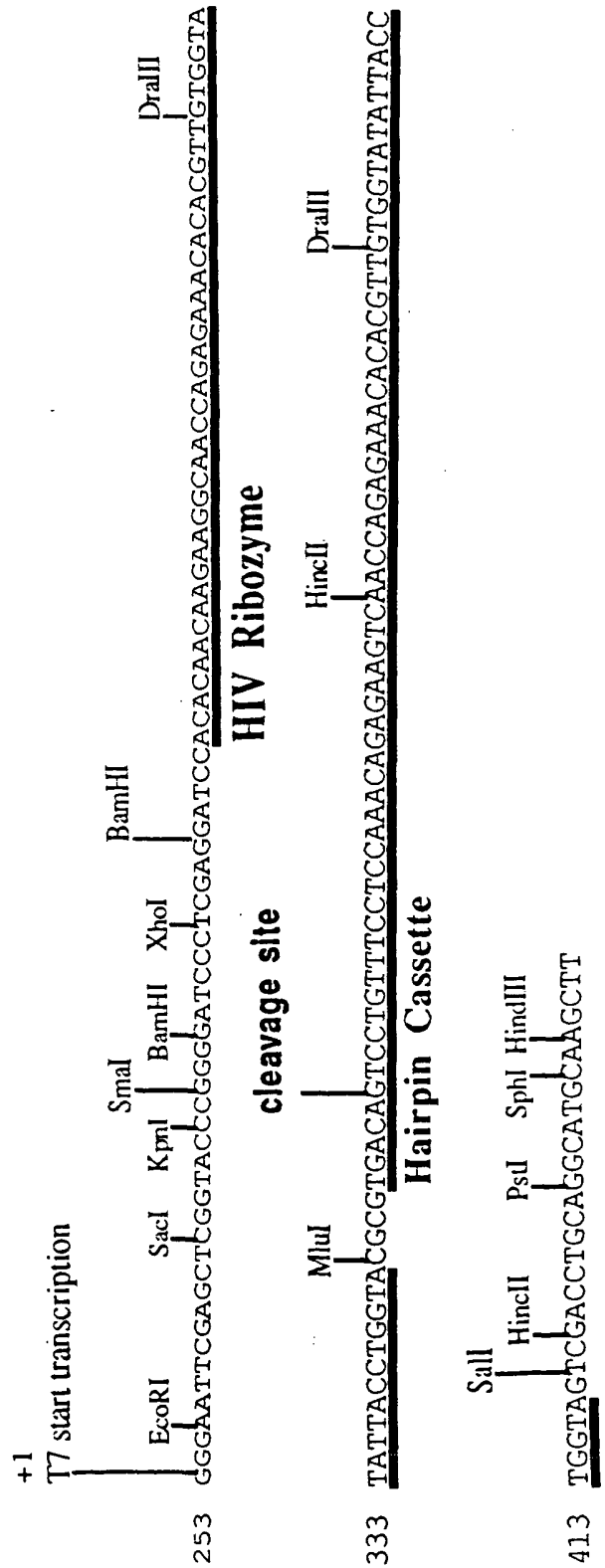


FIG. 34B



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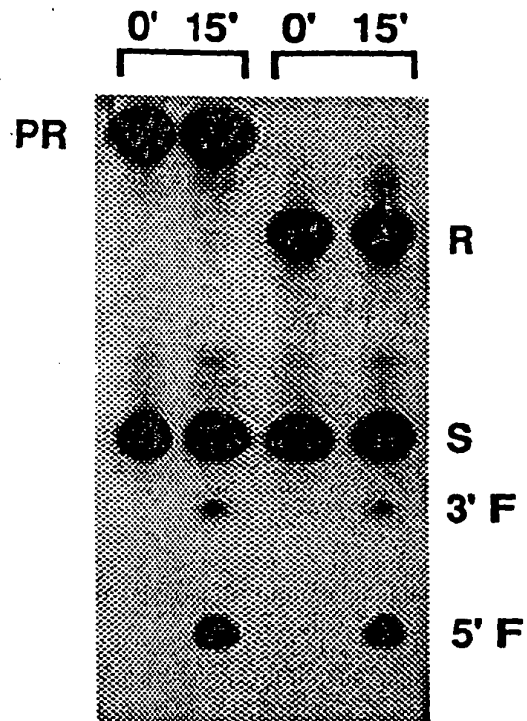


FIG. 35

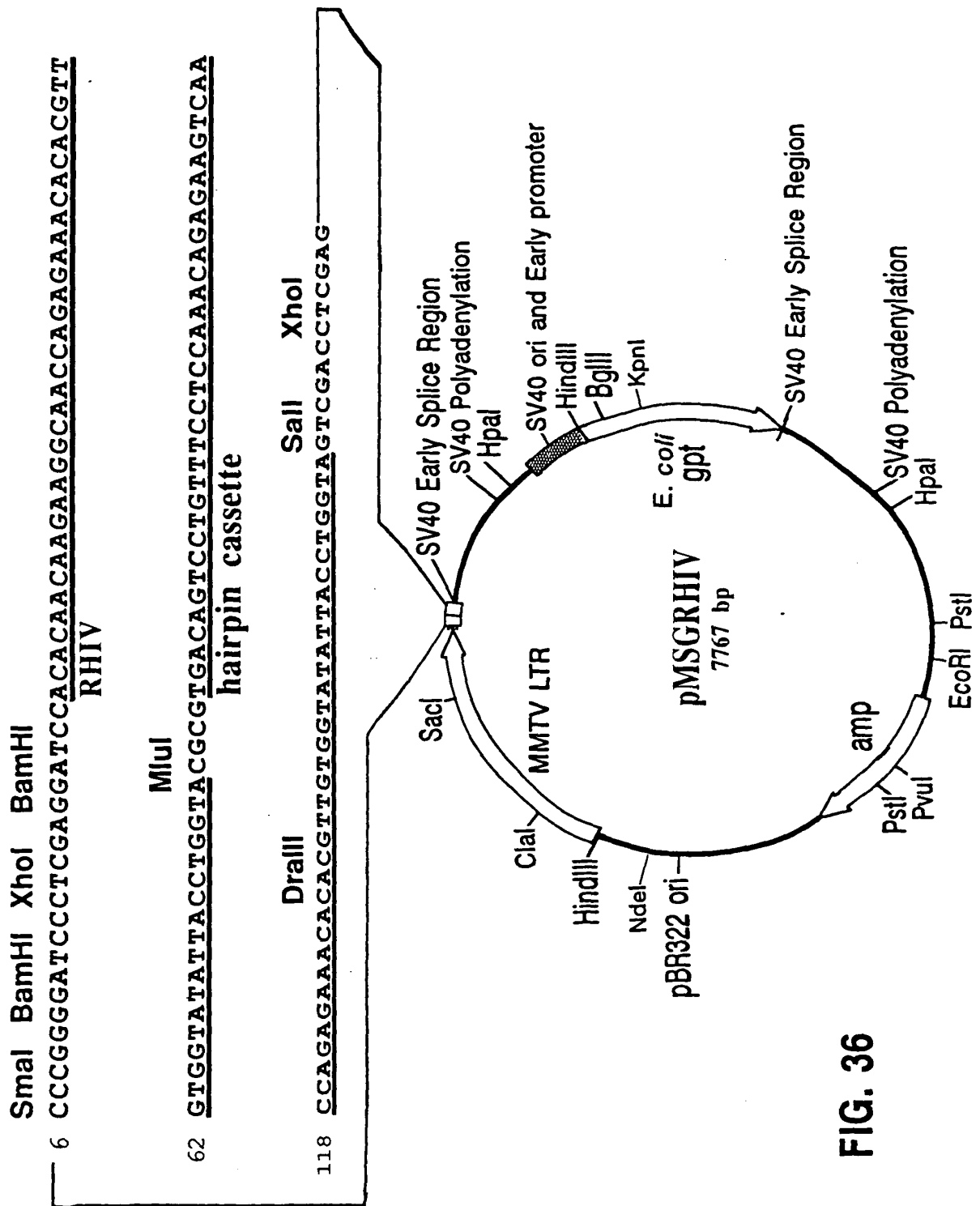


FIG. 36

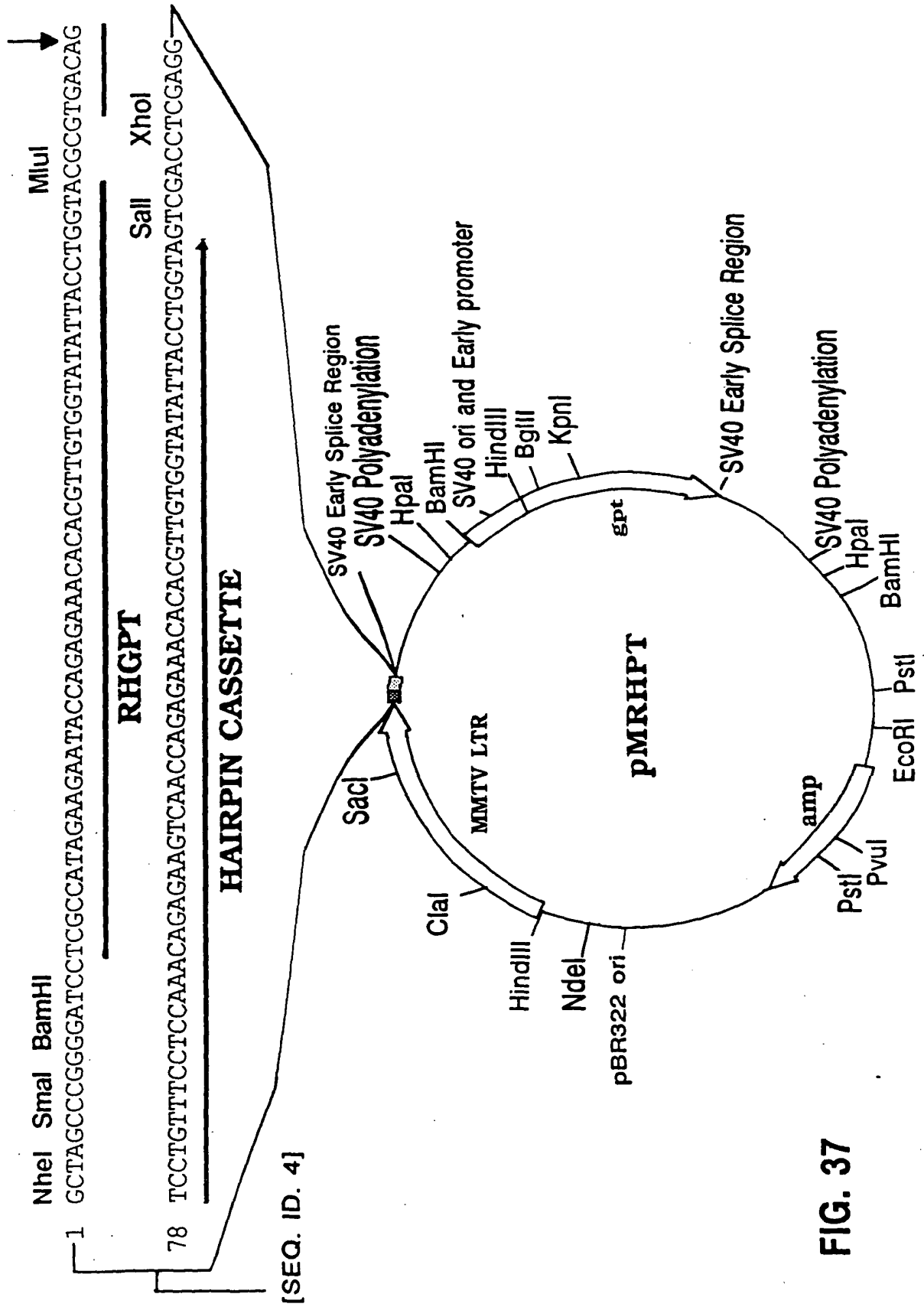
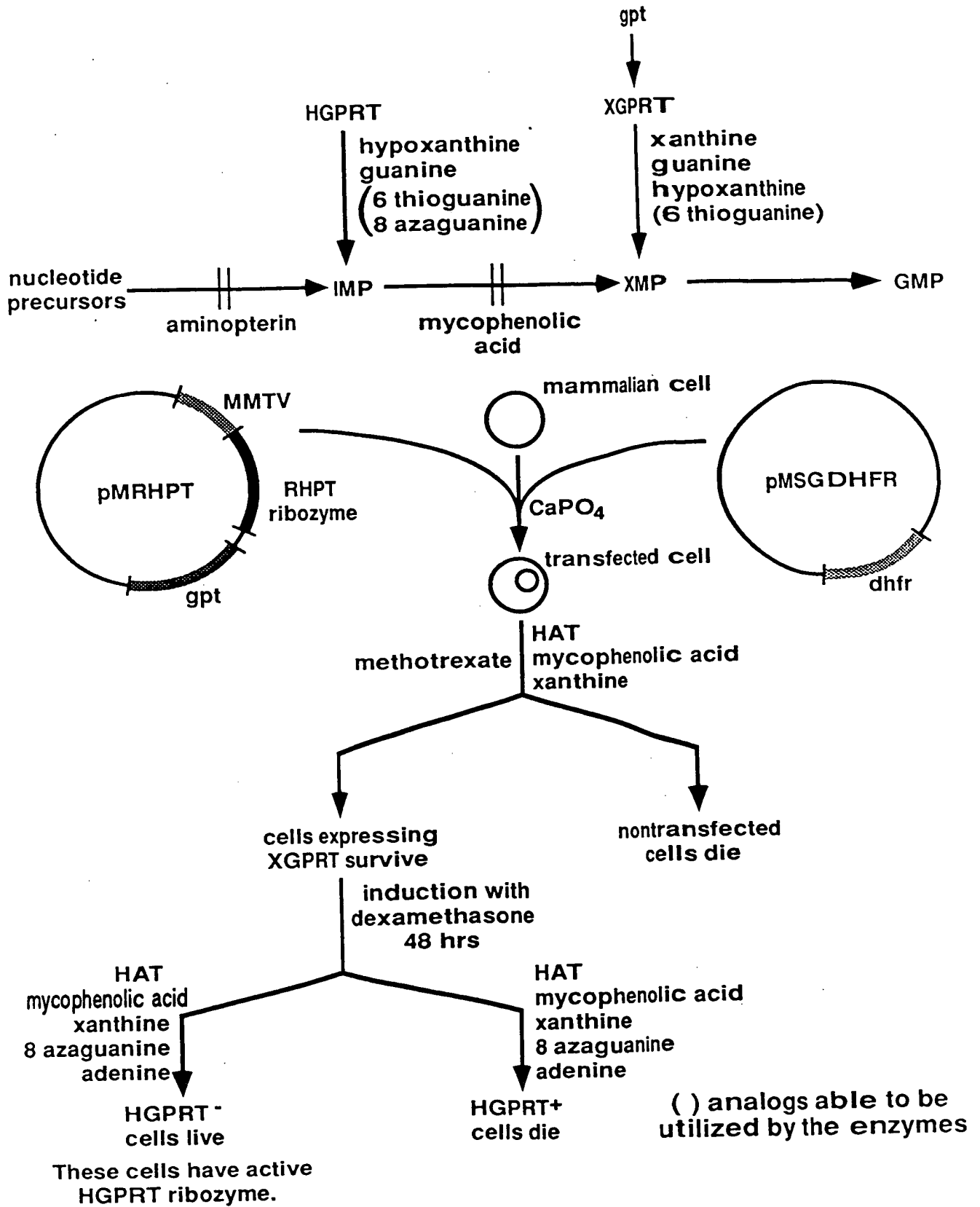


FIG. 37

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FIG. 38

Selection of Cells With HGPRT Ribozyme



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FIG. 39

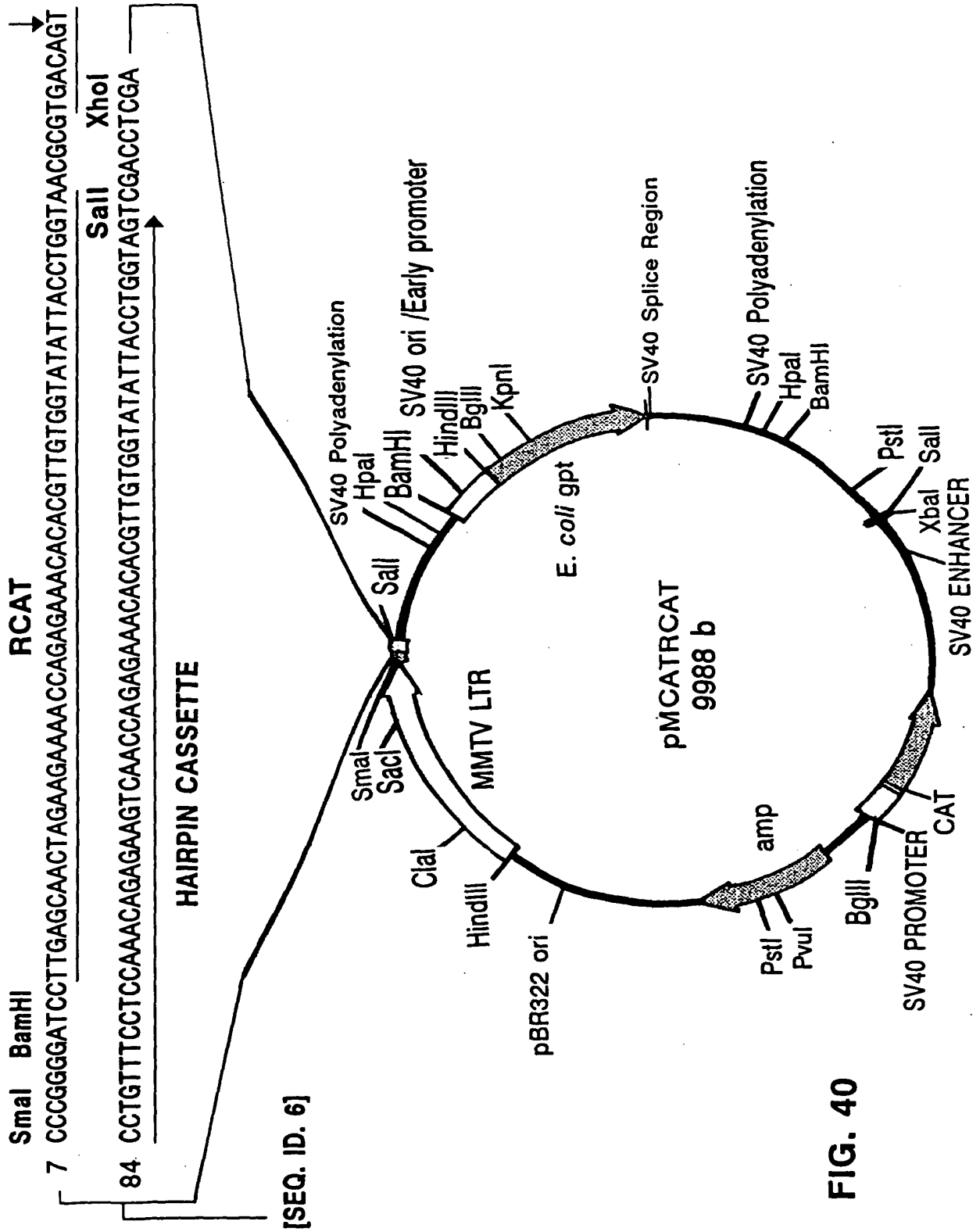


FIG. 40

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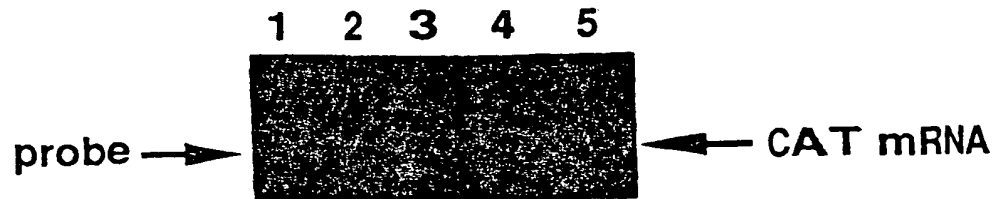


FIG. 41

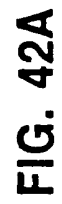


FIG. 42A

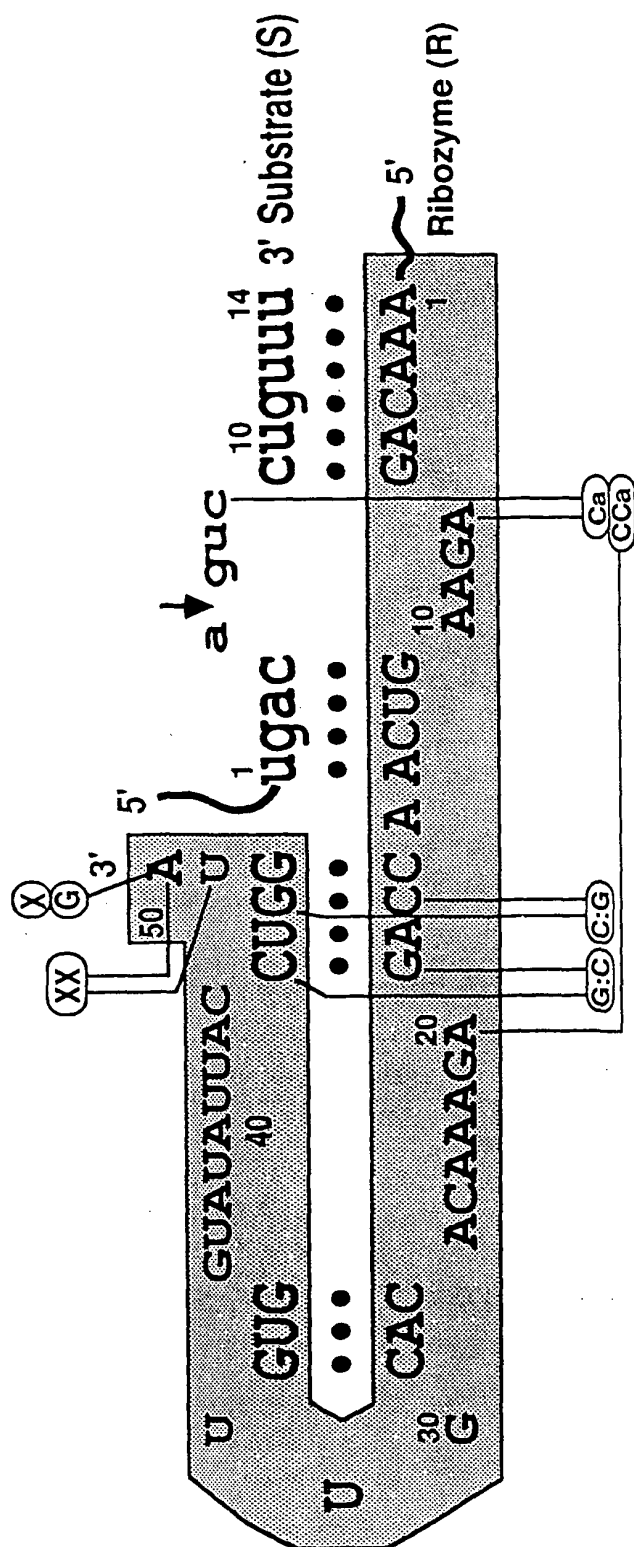


FIG. 42B

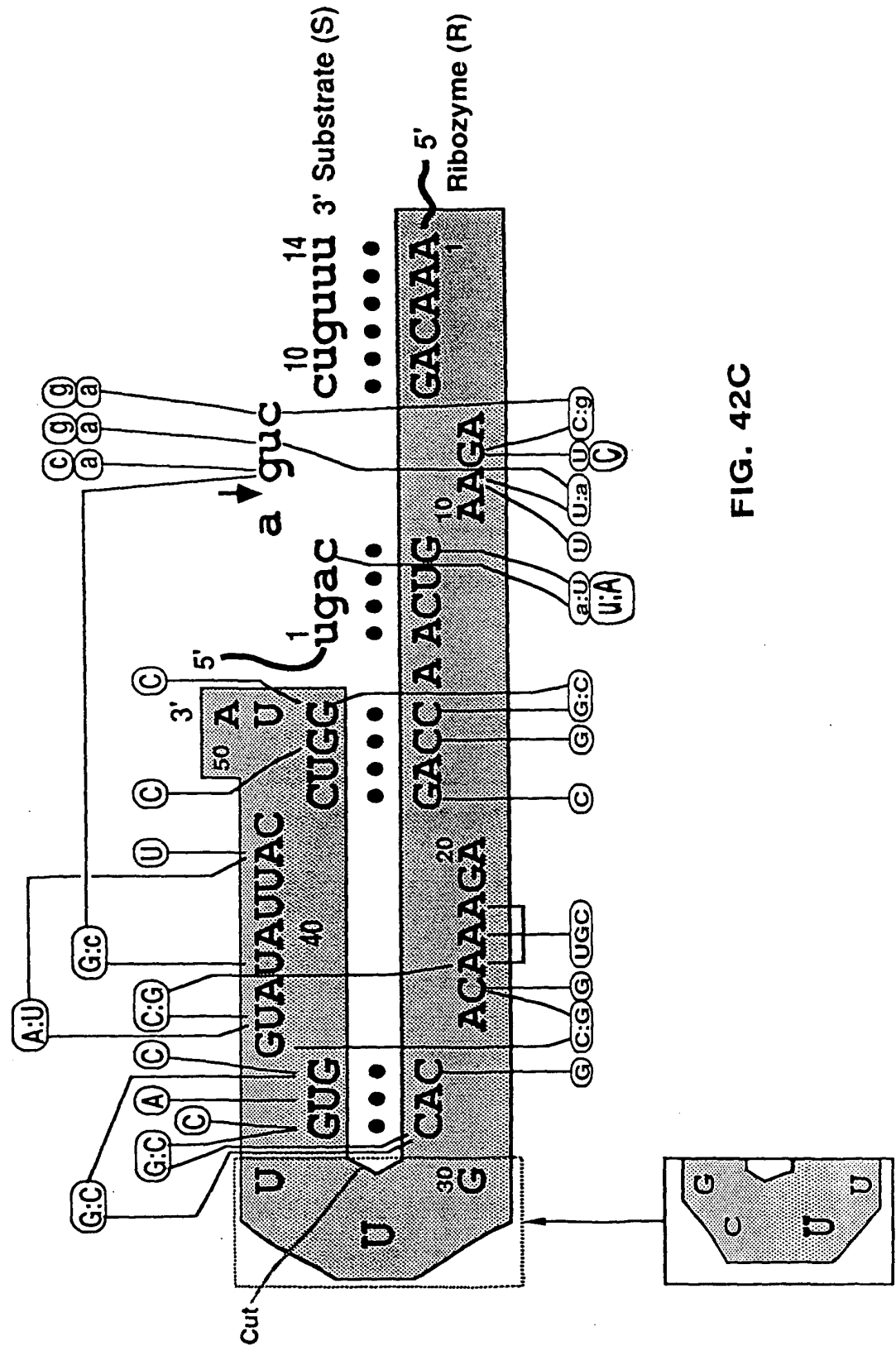
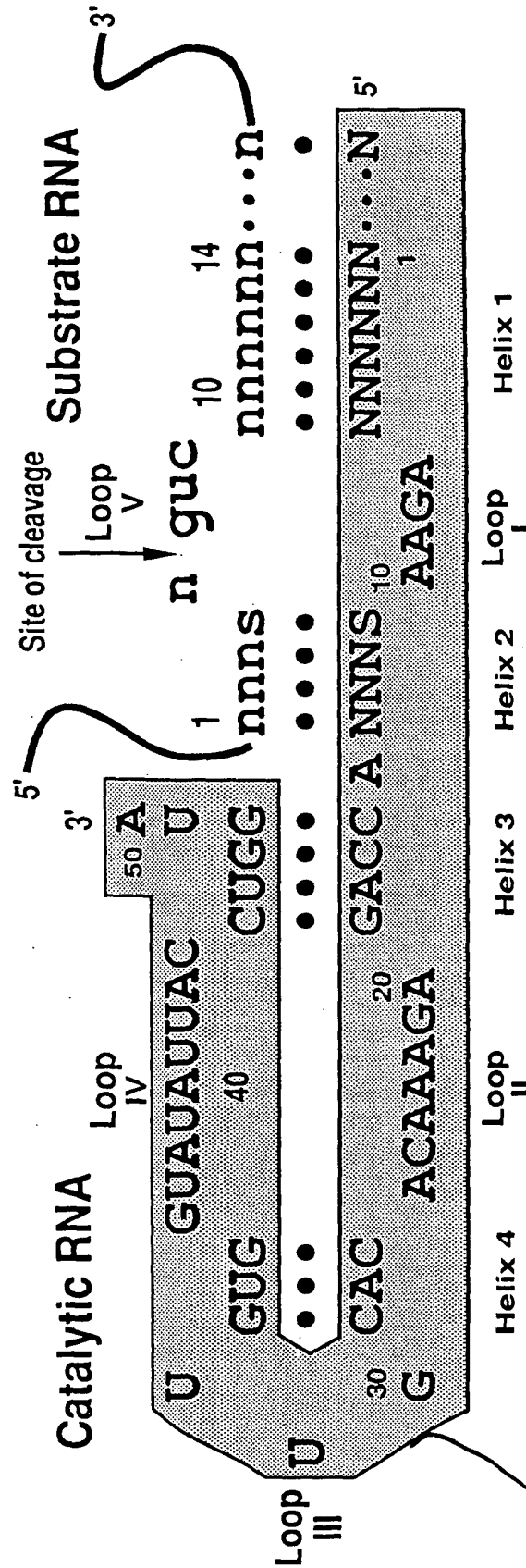


FIG. 42C



[SEQ. ID. 7]

FIG. 42D

FIG. 43

